A RESTy-JSON API with spray.io and maven

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sponsored by

special appearance

about me

n. /iŋ'nazi/

1) problem solver, Garbage Collector, mostly java, learning scala, some agile

2) kayaker

3) under construction

4) wears glasses

what we saw

- BDD (cucumber)
- TDD (scalatest)
- sbt (inifinite run)
- intelliJ
- JAX-RS
- Jetty

what we'll see

- BDD (cucumber)
- TDD (scalatest)
- sbt (inifinite run)
- intelliJ
- JAX-RS
- Jetty

- BDD (cucumber)
- TDD (scalatest)
- mvn (inifinite run)
- eclipse (worksheet)
- spray-json (shapeless)
- spray-can/https/...

why? (1/2)

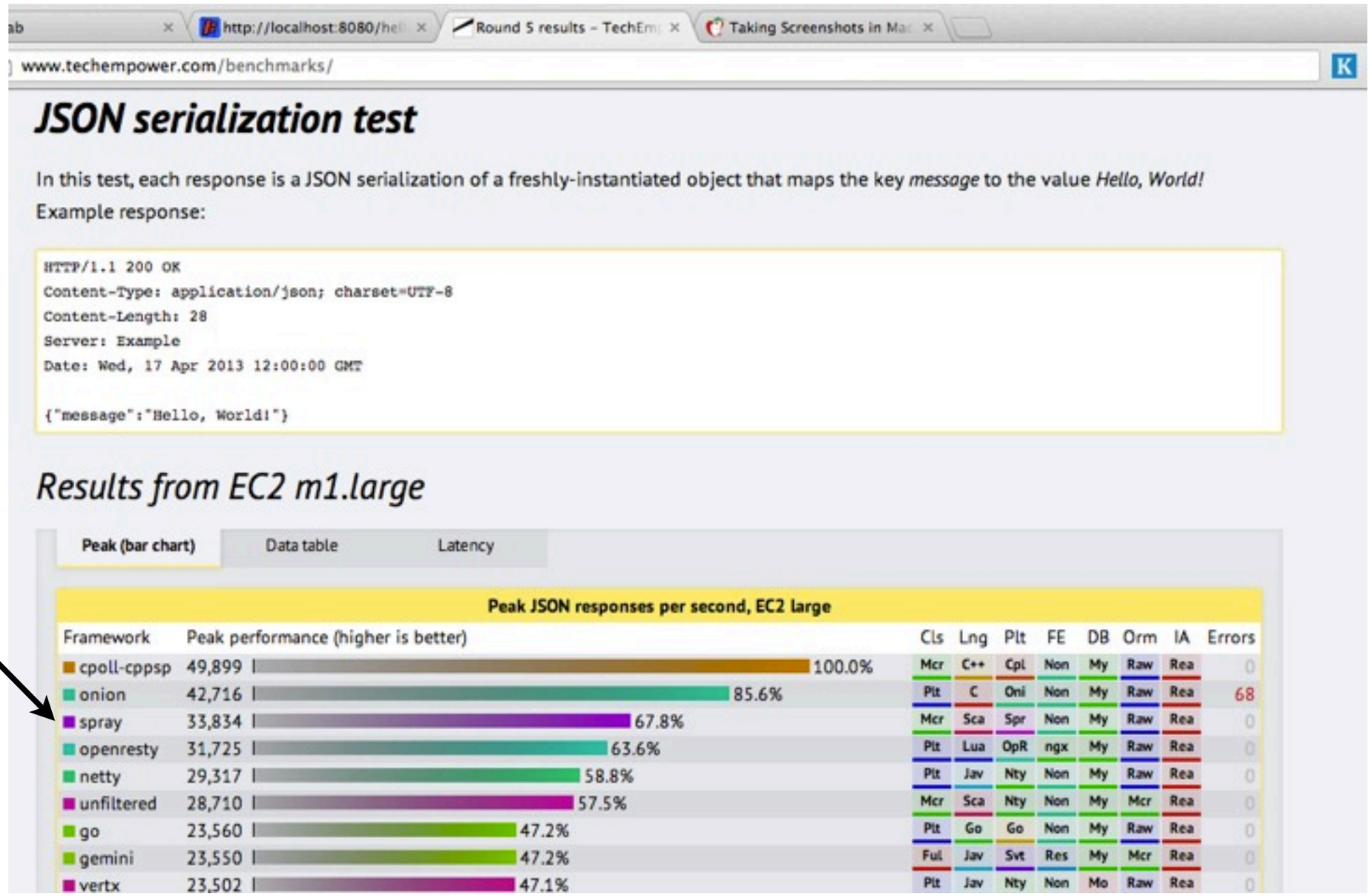
- I'm comfy with eclipse
- I'm comfy with maven (I know that's weird)
- *(no more) Typesafe delivers a prepacked env*
- eclipse-maven integration is solid
- I needed infinite-test in maven at work
- I like trolling Jordi and Jose

why? (2/2)

- spray.io has akka
- spray.io is extremely modularized
- I don’t need java API (@see play)
- spray-json is f*&[ing simple (via shapeless)

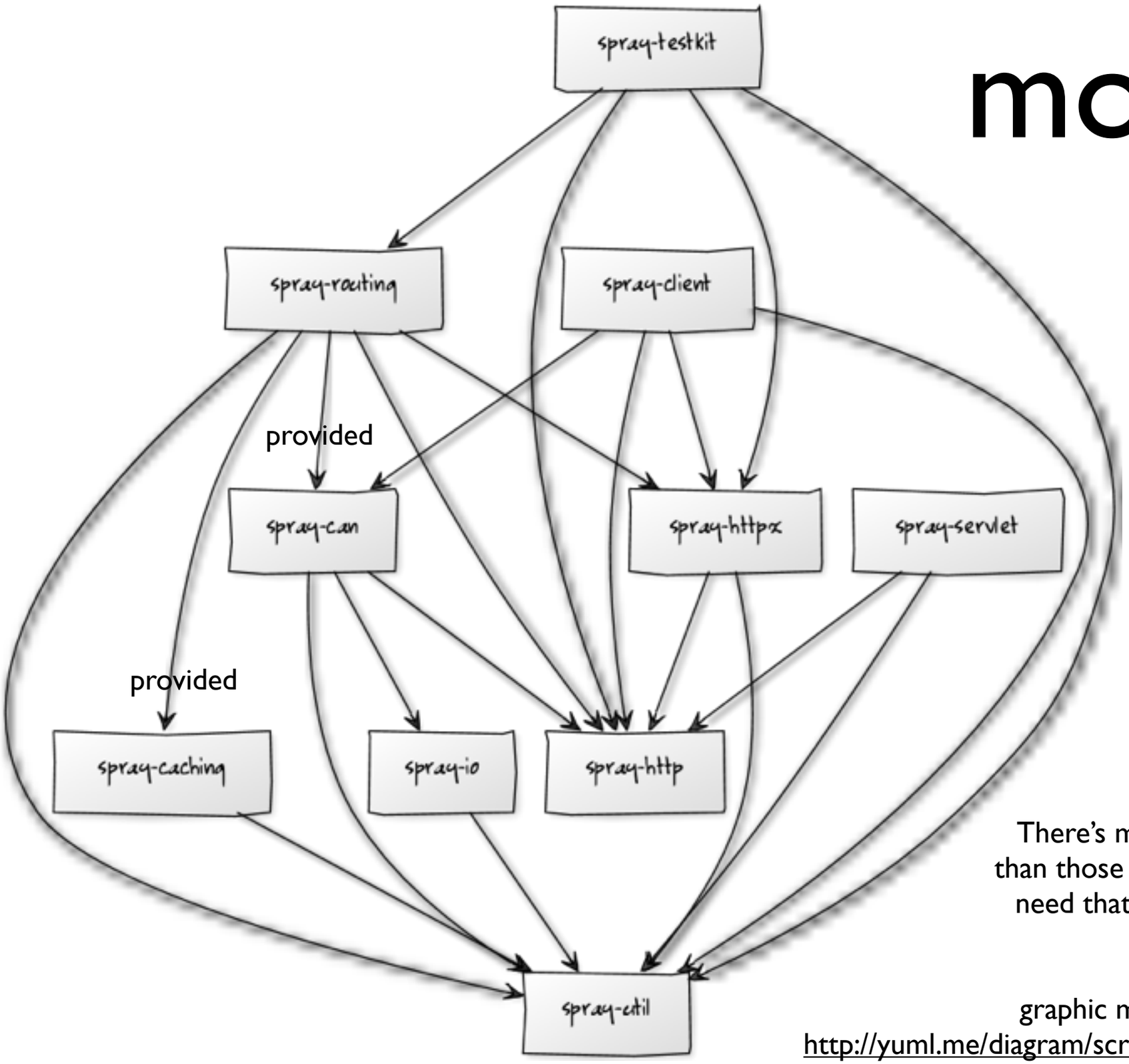
why? (bonus)

- spray.io beats all other JVM stack (*)



http://www.techempower.com/benchmarks/

spray modules



There's more dep's provided than those labelled but we don't need that level of detail now.

graphic made using yuml.me
http://yuml.me/diagram/scruffy/class/[A]->[B],[A]->[C],[B]->[C]

spray

- spray-routing => simple entry point.
- @sirthias (Mathias Doenitz) in Akka 2.2
- magnet pattern
  - alternate to method overload
- ???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step 1

- Given an HTTP server
- When I GET /hello
- Then I obtain “hello”

step 2

- Given an HTTP server
- When I GET /hello.json
- Then I obtain “{msg:‘world’}”

directives + complete

- path/pathPrefix/pathTest
- authenticate
- get/post/delete/...
- decodeRequest/encodeResponse/...
- cache/alwaysCache/...

- complete

http://spray.io/documentation/spray-routing/predefined-directives-alphabetically/

step 3

- Given an HTTP server
- When I GET /books.json
- Then I obtain the complete books stock

step 4

- Given an HTTP server
- And I POST a book.txt in /books
- When I GET /books.json
- Then I obtain the updated books stock

step 5

- Given an HTTP server
- And a programmatic HTTP client
- When I GET /hello.json
- Then I obtain “{msg:‘world’}”

conclusions

- scala in maven is tough
  - mvn plugin lacks infini-run, infini-install,...
- scala worksheet rocks
- spray allows a quick entry point
- ...