



# EURUKO2012

AMSTERDAM - 1<sup>st</sup> & 2<sup>nd</sup> JUNE

## Athens ruby meetup #11

22 June 2012

Theodoros Orfanidis | [@teoulas](https://twitter.com/teoulas)



# Yukihiro Matsumoto

## One size does not fit all

- Ruby's Unix scripting beginnings
- Moved to CGI/WWW
- Mobile age
- Embedded systems, appliances, other devices
- Ruby fits brain, but not small devices
- Alternative runtimes, JRuby, rubinus, maglev
- mruby!
- Separate parser, ship bytecode
- Include custom subset of core libraries and classes
- Incremental GC, MRI GC pauses
- Soft-realtime
- Embeddable in applications (like lua)



## Sean Cribbs

# A Case of Accidental Concurrency

- Intro (Riak promotion, Erlang usage @ basho)
- Riak streaming operations (eg. HTTP chunked encoding)
- Curb/libcurl takes a block that runs each chunk
- libcurl handle reuse issue (not re-entrant)
- Fibers
- "Pump" (event-loop like)
- Connection pool
- Scope leak (shared resources)
- Pass custom behaviour to library (eg. curb)



# Vicent Martí

## Ruby is unlike a Banana

- github:fi fork for JRuby was behind
- Re-merged with github.com running on MRI
- They don't believe in JVM
- Need C to understand UNIX?
- Need UNIX to understand Ruby
- UNIX philosophy of simple tools
- Ruby: So UNIX it hurts
- github is a UNIX shop



# Eloy Durán

## CocoaPods

**DAY 1**

- Objective-C situation with libraries
- Shaving
- Bundler-like simplicity
- Singing!



**Rick Olson**

# ZeroMQ: Supercharged Sockets

- Travis-CI uses AMQP
- Experiment with ZeroMQ
- Library, not server (unlike resque, rabbitMQ)
- Content agnostic
- Thread to thread, IPC, TCP, Multicast
- Parallel pipeline, Pub-sub patterns



## Ruby's bin men: a closer look at the garbage collector

- Automatic, dynamic, memory management
- Ruby: all in the heap
- Rails: long running-processes, lots of objects (350k!)
- MRI (1.8): Conservative, mark-and-sweep, stop-the-world
- YARV (1.9): Lazy sweep, Env. vars
- REE (1.8): Copy-on-write
- Ruby 2.0: Bitmap marking, parallel marking
- Rubinius: Generational GC
- JRuby: JVM GC (generational)



## Modular & reusable front-end code with HTML5, Sass and CoffeeScript

- Modular HTML (using HTML5 elements)
- Module gets its own (generic) class name
- Module gets its own scope
- Use classes, not IDs
- Shallow selectors
- CSS nesting using SASS
- Media queries in the module (using SASS)
- IDs and data-attrs for Javascript hooks
- File per module





# Martin Rehfeld

## Ruby & Erlang - At Scale with Style

- 14b req/month, 100k DB ops/sec
- Stateless app servers mostly
- Then they went stateful with erlang
- One process per user gaming session, no shared data
- Where's Ruby? Running background jobs
- ZeroMQ for messaging



# Geoffrey Grosenbach

## Watching people code

DAY 2

- Play-by-play series of screencasts
- 90-minute tasks
- Most people use VIM
- Most people don't start with the text editor (sketching)
- Simple tools (UNIX way)
- @tenderlove "flawless" workflow
- TDD helps focusing on the problem
- Delete your code
- Getting lost in the rabbit hole (distractions)
- Flow (skater analogy)
- Sunk cost fallacy



# Mitchell Hashimoto

DAY 2

## Building a Ruby Library, the Parts No One Talks About

- Intuitive API (idiomatic)
- Configuration (plain old Ruby)
- Logging (stdlib Logger is shit)
- Exceptions (abstraction leakage)
- Documentation (YARD, Jekyll)
- Support
- Whole is greater than sum



## **Brian Ford**

# Code Insight: Rubinius 2.0 and Nikita

- Generational GC
- Uses LLVM
- Inlining
- Provides C API
- Internals (primitives and compiled methods)



## **Bruno Aguirre**

# The Future is Dead: Long live the Past

- UNIX philosophy
- Simple parts, clean interfaces
- Single responsibility principle
- Keep it simple stupid (KISS)
- Forgotten database features due to ORMs
- Constraints (FKs, unique indexes)
- Prepared statements, stored procedures
- HTTP protocol history
- HTTP Upgrade header
- PTTH
- Learn from the past



# Konstantin Haase

## Beyond Ruby

DAY 2

- Full object orientation
- Data and functionality?
- Message sending
- Extreme late binding
- Newspeak, only message sending
- Homoiconicity (program code as primitive data type)
- Declarative programming (prolog, erlang)
- Hardware programming (VHDL)



## Terence Lee

# Bundle install Y U SO SLOW

- Dependencies before bundler
- Bundler 1.0 was slow
- Gem spec files (version info, no dep. info)
- .gemspec files (dependencies)
- Dependency tree memory-heavy, slow
- Rubygems API endpoint, fetches deps
- Private gem server complexity
- Gem development locally
- Gem with binstubs, bundle exec or not?



# Charles Nutter

## JRuby, dudes!

- Red hat supports JRuby
- JRuby as a drop-in replacement for MRI
- JVM not very POSIXy
- JRuby 1.7 defaults to Ruby 1.9.3 features
- Swing GUI and midi audio demo from jirb!
- JRuby takes advantage of JVM optimizations
- On the server: Trinidad and Torquebox
- JVM GC and multi-threading
- Profiling and monitoring tools for the JVM
- VisualVM demo



<http://vimeo.com/euruko/videos>

# Our turn!

EuRuKo 2013 in Athens!