

Rubinius

- Developers needs
- Advantages over MRI
- Rubinius makes you a better programmer
- Digging into VM

- What do developers need
 - Performance
 - Concurrency
 - Low Memory footprint
 - Tools
 - Extensibility

Performance

- Fastest plain ruby code execution:
 - JIT
 - Byte Code
- Making VM faster makes core classes faster

Concurrency

- No GIL
- Multi threading (celluloid)
- Multiple processes (passenger)

Memory

- Memory is cheap

Memory

- Great memory management optimizations
 - Objects layout
- Objects can be moved
- Awesome GC

Tools

- Debugger
- Profiler
- Remote agent

Remote Agent

- `rbx -Xagent.start ruby_script.rb`
- `rbx console`
 - Heap dump
 - Threads status (including backtrace)

Extensibility

- C-extensions
- FFI
- Ruby

Advantages over MRI

- Written in ruby itself
- Easily extensible
- Every one can help:
 - one accepted patch = commit access
- Good platform for compilers (Fancy)

Rubinius makes you a better programmer

- You can learn a lot from stdlib:
 - Patterns
 - Clean code

Digging into VM

- VM instructions (Brainfuck)
- JIT
- Garbage Collector
- Bytecode compiler

Questions?