

JRuby

on and off Rails

by Mathieu Martin

Ruby interpreters

MRI

JRuby

IronRuby

YARV

Rubinius

Cardinal

XRuby

Ruby.Net

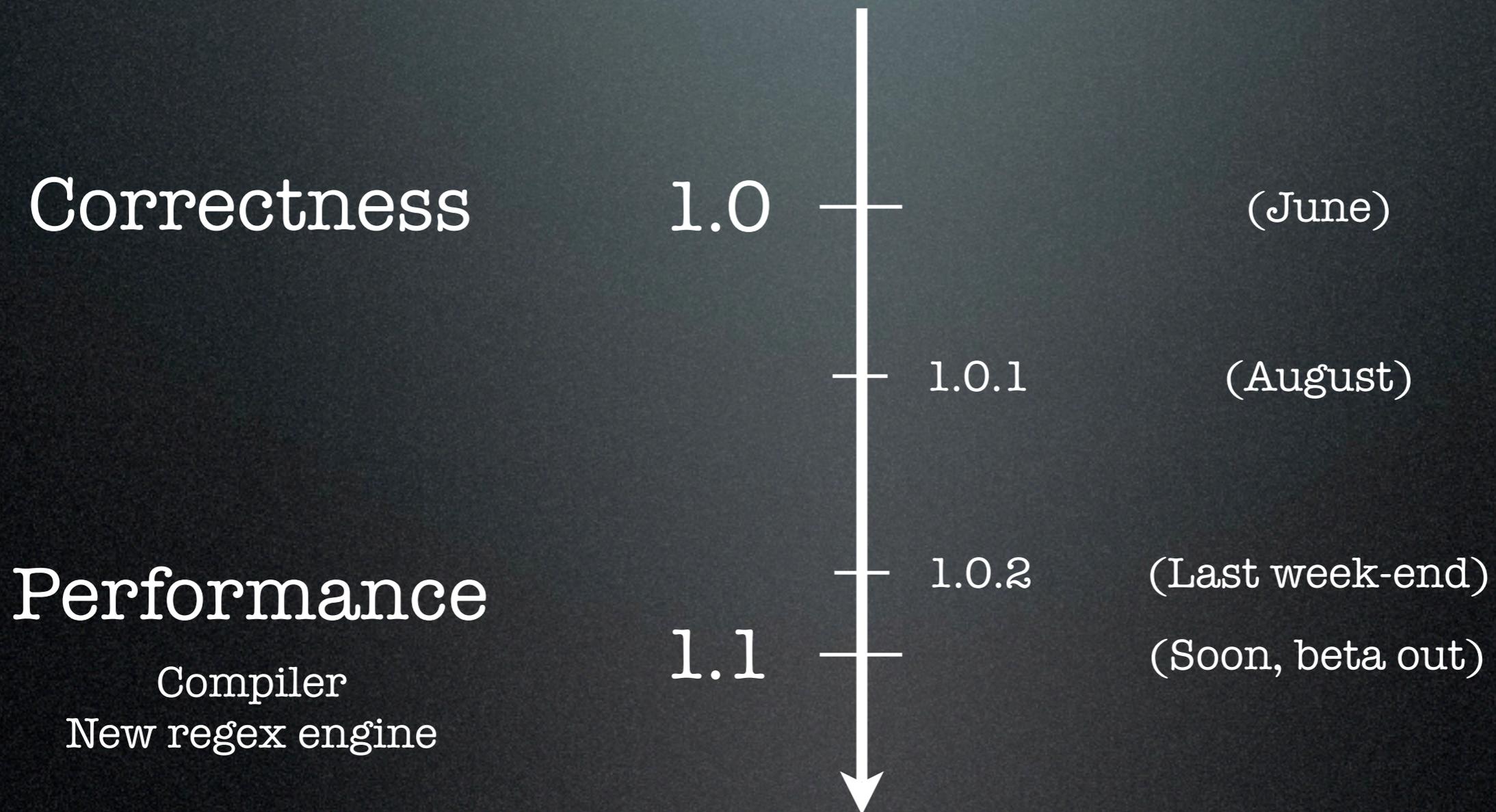
What JRuby is

An interpreter

A compiler

Timeline

(Extremely detailed, thank you)



Why do we care?

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Why do we care?

Performance-critical code is

Java

not C

Why do we care?

Use Java libraries from Ruby code

Source code parsing

Legacy Java code

Crypto

Credit card processing

RFID

Why do we care?

Using Rails in Java shops

=> Just deploy your WAR file

Why do we care?

Real threads

Thread pools

(A temporary advantage)

But C extensions?

Once thought impossible. Now:

Declaration

```
import com.sun.jna.Library;  
public interface POSIX extends Library {  
    public int chmod(String filename, int mode);  
    public int chown(String filename, int owner, int group);  
}
```

Use

```
import com.sun.jna.Native;  
POSIX posix = (POSIX)Native.loadLibrary("c", POSIX.class);
```

Thanks to the JNA Java library



Source at the end

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And performance?

As of JRuby 1.1

With Java 1.6...

And performance?

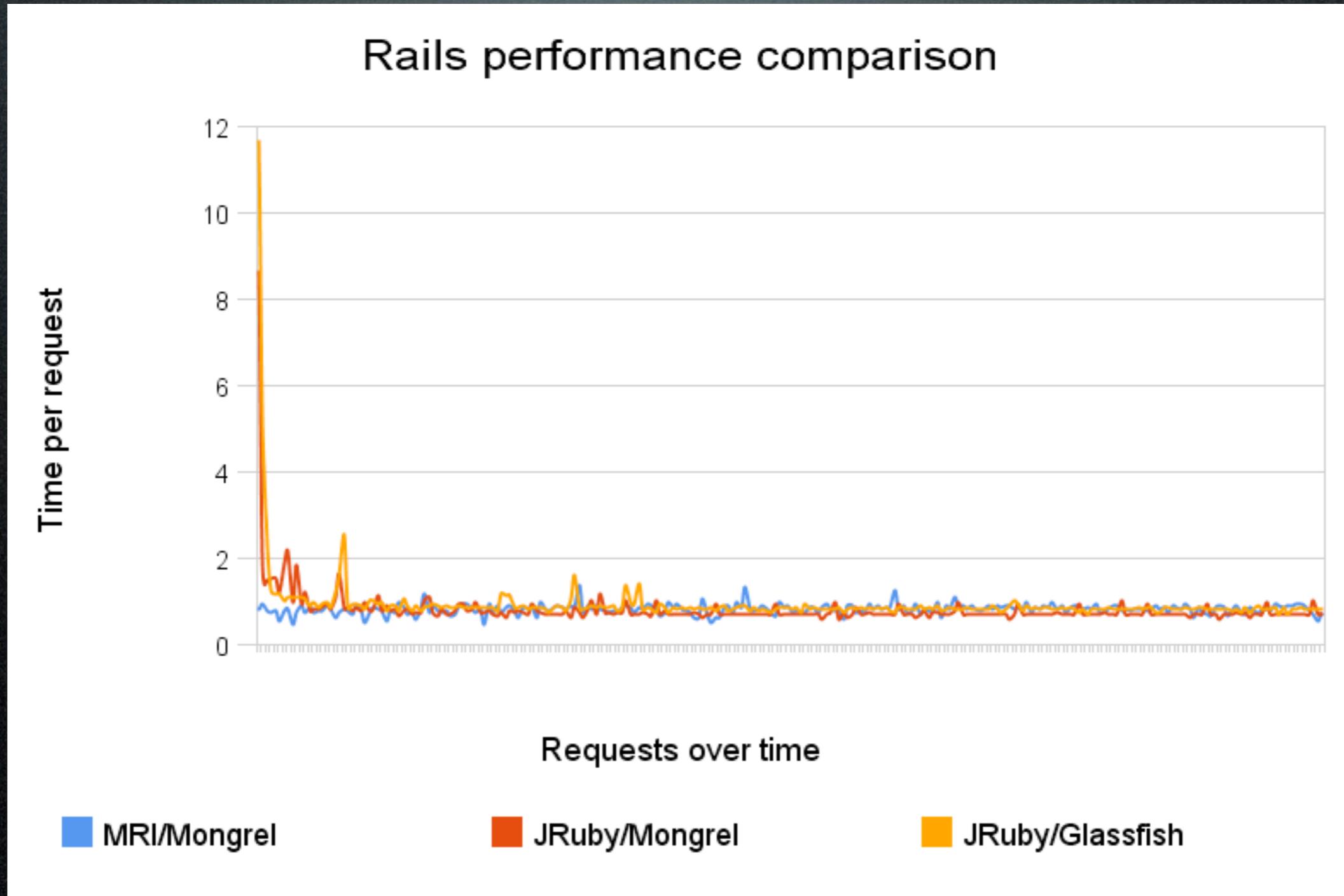
JRuby 1.1 might be the fastest way
to run Ruby 1.8 and Rails

About performance

Performance improvements come from:

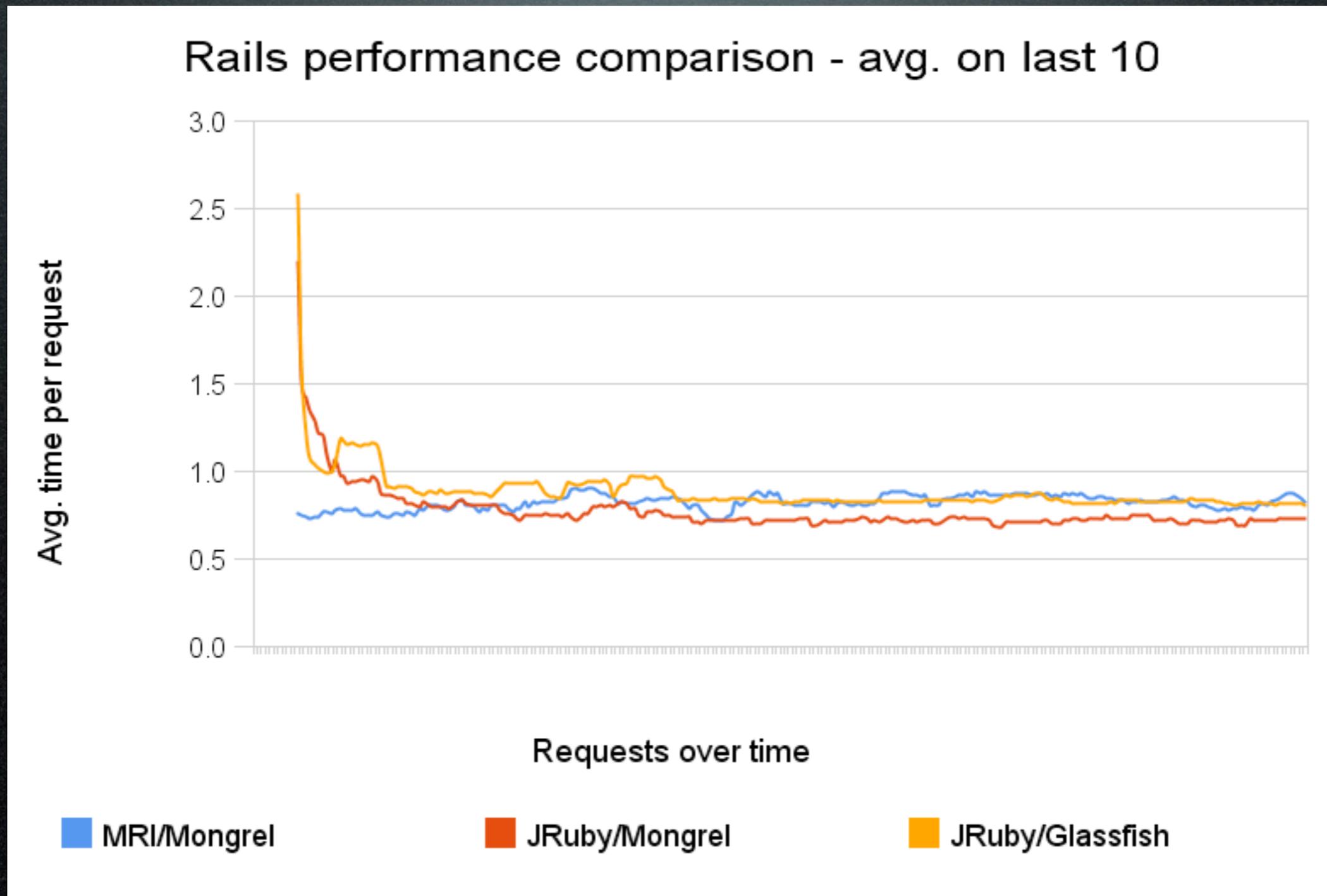
- JRuby team improving JRuby (free)
- Sun improving the JVM (free)
- Tweaking JVM settings and profiling (risk-free)
- You fixing your ugly code (work!)

Let's back this up



Based on Nick Sieger's blog post from Oct 24th

Let's back this up



Based on Nick Sieger's blog post from Oct 24th

So?

All that on JRuby 1.0.1

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Use cases

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Use case: scripting

Not really its strength:

- x JVM too long to start
- x console clunky when Ruby and JRuby live side by side

```
mm:~ mat$ jruby -S gem list
```

Use case: client-side app

Might work:

- ✓ App runs long enough
- ✓ No frills install (+/-)

Java has a good market penetration

- ✓ Swing's getting pretty fast

Check out Profligacy by Zed Shaw

Use case: server-side app

That's where it's happening

- ✓ Server JVM optimizes app at runtime
- ✓ Lots of great servers
 - Glassfish, JBoss, Oracle, Tomcat, Jetty...
- ✓ Great monitoring tools
- ✓ Deployment of a WAR file

Demo time?

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What I'm about to use...

- mysql jdbc adapter
- activerecord-jdbc gem
- Glassfish and Jetty web servers
- Goldspike: Rails app => WAR file

Other options

- Warbler: also Rails app => WAR
- Glassfish gem is also available

Demo time!

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What's the catch?

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Downsides to JRuby

- Moving at breakneck speed
 - ✓ Getting very good very fast
 - x Documentation is lagging a bit and scattered over different blogs

Downsides to JRuby

- Some bugs remaining
- Still some differences vs MRI
 - Not all plugins will work out of the box

We can help!

- Contribute to the wiki
 - Blog about your findings, then put it on the wiki
- Contribute code fixes
 - To JRuby
 - To Goldspike
 - To Glassfish, Jetty

To know more

- Charles Oliver Nutter
=> headius.blogspot.com
- Ola Bini
=> ola-bini.blogspot.com
- Nick Sieger
=> blog.nicksieger.com
- Thomas Enebo
=> bloglines.com/blog/ThomasEEnebo

To know more

- The sites

=> jruby.org -> jruby.codehaus.org

=> headius.com/jrubywiki

- Mailing lists

=> [user](#)

=> [dev](#)

=> [scm](#)

To know more

- Other sources

- => ADS blog: rorblog.techcf.com/category/jruby/
(2 great step by step JRuby tutorials)

- => jrubyinside.com

- => glassfish.dev.java.net

- => Glassfish gem:

- => weblogs.java.net/blog/arungupta/archive/2007/09/announcing_glas.html

- => Profligacy (Swing): ihate.rubyforge.org/profligacy

Elephant in the room

=> [Article: newyorker.com/online/2007/05/14/slideshow_070514_banksy](http://newyorker.com/online/2007/05/14/slideshow_070514_banksy)

=> [Artist: http://www.banksy.co.uk/](http://www.banksy.co.uk/)

Shameless plug

I'll put this presentation on my blog

=> webmat.wordpress.com

Note: the performance charts are available at
<http://spreadsheets.google.com/pub?key=ps7Wjwj1ZaG0mmOXH5bRtTA>

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Questions?
Comments?

Insults? => /dev/null