

Your Humble Host

- Chris Nelson
- Longtime Java developer
- More recent Ruby developer
- JRuby contributor and enthusiast



Except where otherwise noted, the content of this presentation is licensed under the Creative Commons Attribution-Share Alike 3.0 United States License (<http://creativecommons.org/licenses/by-sa/3.0/us/>).

**This presentation consists of 74.573% post
consumer recycled material!**

JRuby: It's ready already

Chris Nelson

(with some liberal borrowing from Charles Nutter and
Thomas Enebo)

JRuby: What is it?

It's Ruby

on the Java VM

Any Questions?

What's Java?

- A) A C like programming language
- B) An evil conspiracy hatched by SUN Microsystems to take over the world
- C) The COBOL of the 21st century

D) It's a platform!

A Floor Wax and a Dessert Topping

JRuby is:

- Ruby (1.8ish)
- A non-Java language for the Java platform
- A new way to look at Ruby and the JVM
- Helping to expand Ruby's reach
- Helping the world better understand Ruby
- Really cool

A Floor Wax and a Dessert Topping

JRuby is not:

- An attempt to pollute or fork Ruby
- The answer to every problem with Ruby
- An attempt to alter Ruby or add incompatible features
- Slow

But It's Java, Too

```
include Java
import java.lang.ArrayList
import javax.swing.JFrame

list = ArrayList.new
frame = JFrame.new("Ruby SWINGS!")
list << frame
list.each {|f| f.set_size(200,200) }
```

Java When You Want It

include Java

```
import java.lang.ArrayList
```

```
import javax.swing.JFrame
```

```
list = ArrayList.new
```

```
frame = JFrame.new("Ruby SWINGS!")
```

```
list << frame
```

```
list.each {|f| f.set_size(200,200) }
```

Libraries You Need

```
include Java  
import java.lang.ArrayList  
import javax.swing.JFrame
```

```
list = ArrayList.new  
frame = JFrame.new("Ruby SWINGS!")  
list << frame  
list.each {|f| f.set_size(200,200) }
```

But Rubified!

```
include Java
import java.lang.ArrayList
import javax.swing.JFrame

list = ArrayList.new
frame = JFrame.new("Ruby SWINGS!")
list << frame
list.each {|f| f.set_size(200,200) }
```

Let's Code!

JRuby history

- Started in in 2002
- Revitalized in 2005 by Charles Nutter and Thomas Enobo
- Both work on it full time for SUN

And the Ruby stuff you expect

- Obvious libraries and gems preinstalled
 - RubyGems (obviously)
 - Rake
 - Rspec
- Mongrel supports JRuby
 - No remote gem, download from jruby-extras project
- Rails “just works”
 - Major orgs now investing in JRuby on Rails

Ruby is good for Java

- Java is not just a language
- We need easier ways to develop on the JVM
- Ruby is a great programming language

Java is good for Ruby

- Things which Ruby/Rails could use
 - More IDE support
 - Support for more stuff (databases, etc)
 - An easier “drop down” language
 - Deployment
 - Better performance

Performance Demo

JRuby Compiler

- First Ruby compiler for a general-purpose VM
- Fastest 1.8-compatible execution
- AOT mode
 - Avoids JIT warmup time
 - Works well with “compile, run” development
 - Maybe faster startup in future? (a bit slower right now)
- JIT mode
 - Fits with typical Ruby “just run it” development
 - Eventually as fast as AOT
 - You don't have to do anything different

- Been working for over a year
 - Mingle
- 1.2.x and 2.0 work
- ActiveRecordJDBC uses JDBC in AR
- Goldspike plugin runs rails in a J2EE appserver
- Warbler easily packages your Rails app into a war file

Default pure-Ruby MySQL driver works...

development:

adapter: mysql

database: testapp_development

username: testapp

password: testapp

host: localhost

To get jdbc, it's as simple as this:

```
development:
```

```
  adapter: jdbcmysql
```

```
  username: testapp
```

```
  password: testapp
```

```
  driver: com.mysql.jdbc.Driver
```

JNDI for connection pooling

development:

adapter: jdbc

jndi: java:comp/env/jdbc/MyAppPool

driver: mysql

- `gem install warble`
- In your rails app: `warble`
 - Builds a self contained war file for your project
 - Drop into your favorite J2EE appserver (you have one, right?)
- `warble config` gives you a config file to tweak
 - You'll need to add some gems

Rails Demo

Native Extensions

- Some ports done, some in progress
 - Mongrel: done
 - Hpricot: done
 - Database support: some done, some in progress
 - RMagick: in progress
- We're looking for porters and recommendations

Whoa, What “Good” Java EE Features?

Java EE has a lot of bathwater, but a lot of baby

- Java Message Service
- Java Persistence API (good riddance Entity Beans)
- Java Transaction API
- Easy deployment, clustering, failover, management
- Scales great
 - Though Java's complexity makes it tricky

A Grizzly/GlassFish gem

- Lightweight, gem-installable like Mongrel
- Concurrency, pooling, multi-app like WAR
- Completes the deployment story for JRuby
- Looking for suggestions and help!

Thank You!

JRuby: www.jruby.org

NetBeans: www.netbeans.org

NetBeans Ruby: wiki.netbeans.org/wiki/view/Ruby

Charlie's Blog: headius.blogspot.com

Tom's Blog:
bloglines.com/blog/ThomasEEnebo