

JRuby: Ruby for the Java Platform

Charles Oliver Nutter
Thomas Enebo



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/>).

Introductions: Who are we?

- Charles Oliver Nutter - charles.nutter@sun.com
- Thomas Enebo - thomas.enebo@sun.com
- Engineers at Sun, JRuby core developers
- 10+ years Java experience each
 - > Also C/C++, Win32, C#, .NET, JavaME/CLDC, Perl, LiteStep, JINI, JavaEE
- Working to make Ruby a first-class JVM language
- Working to make JVM a better home for dynlangs

Agenda

- Introduction to JRuby
- IRB Demo
- JRuby on Rails
- Simple JRuby on Rails Demo
- Conclusion and Q/A

What Is JRuby

- Started in 2002
- Ruby for the Java Platform
- Open source, GPL/LGPL/CPL
- Ruby 1.8.5 compatible
- Easy integration with Java
 - > Ruby can call Java, Java can call Ruby
- JRuby Extras project
 - > ActiveRecord-JDBC, GoldSpike, Mongrel...

JRuby 1.0 Released!

- Ready for production use
- Very good compatibility with Ruby 1.8.5
- ThoughtWorks offers commercial support for JRuby
- Try it today!

Why Ruby Users Would Want JRuby

- Performance improving day by day
- Better scalability with native threading
- Compilation to Java bytecode
- Integration with Java libraries
- Easier path to enterprise Ruby

JRuby is fast (Java 6 Server VM)

```
~/work/jruby $ jruby SERVER bench_fib_recursive.rb
2.071000 0.000000 2.071000 ( 2.070000)
1.234000 0.000000 1.234000 ( 1.234000)
1.372000 0.000000 1.372000 ( 1.373000)
1.372000 0.000000 1.372000 ( 1.372000)
```

```
~/work/jruby $ ruby -v
ruby 1.8.5 (2006-12-25 patchlevel 12) [i686-darwin8.8.1]
```

```
~/work/jruby $ ruby bench_fib_recursive.rb
1.670000 0.010000 1.680000 ( 1.680365)
1.660000 0.010000 1.670000 ( 1.675206)
```

...

Demo: Interactive JRuby

JRuby for Rails Developers

- Easier deployment
 - > Web ARchive files
 - > GlassFish V3 Rails module
- Broader, scalable database support
- Integration with Java libs, legacy services
- Easier to switch framework than app arch

Broad Database Support

4th Dimension (4D RDBMS), ADABAS, ALLBASE SQL, Advantage Database Server, Advantage Ingres 2.6, [Apache Derby](#), BASIS, Birdstep RDM Server, CA-IDMS, CISAM, Cache, Centura SQLBase, Clipper, Cloudscape, CodeBase, D3, DABroker, [DB2](#), DB2 IBM AS/400 UNIX, DB2 Linux, DB2 OS/390, DB2 Windows, DBMaker, DL/I, DMSII, DaffodilDB, DataFlex/PowerFlex, Datacom, Domino, ECB, EDA, Empress RDBMS, Enscribe, Essentia, FireBirdSQL, FirstSQL/J Embedded Mobile, FirstSQL/J Enterprise Server, FormWeb, FoxBase, FoxPro, FrontBase, H2 Database, [HSQLDB](#), IBM AS/400, IDMS, IMS, Image/Turboimage, ImageSQL, Informix, Ingres, InstantDB, InterBase, JDataStore, [Java DB](#), LDAP, [MS Access](#), [MS SQL Server](#), [Mimer SQL](#), [MySQL](#), News Server, Nonstop SQL/MP, ODBC, OS/390 Sequential Files, OleDB-Provider, OpenBase, OpenIngres, [Oracle](#), PICK, Paradox, Pervasive.SQL, PointBase, [PostgreSQL](#), Primebase SQL Database Server, Progress, Quadcap, RDB, RMS, Recital, Redbrick Warehouse, SAP DB, SAS, SESAM/SQL-Server, SOLID Embedded Engine, SOLID SynchroNet, SQL/DS, SQLite, SUPRA Server SQL, SearchServer, Sequential, Solid Server, Sybase, Teradata RDBMS, Text (CSV, Tab separated etc.), ThinkSQL, TinySQL, TurboIMAGE, UNIFY, VFP, VSAM, XML, YARD-SQL, dBase, kdb, mSQL, xbase, xbase

JRuby on Rails can use Java!

- Additional options for Rails developers
- Mature technologies for Rails application

Demo: Simple Rails App

Future of JRuby on Rails

- JRuby on Rails as a first-class web framework
- Improve JEE support for Rails
 - > Database connection pooling
 - > Solidify WARfile deployment
 - > Rails “magic” for EJB, JMS, JTA, JMX
- Improve support for Rubyists
 - > Port more Ruby Native Libraries (Help us!)
 - Rmagick, Mongrel (Ragel), Hpricot (Ragel)
 - > Continue performance, compatibility work

More Information

- JRuby: www.jruby.org
- JRuby Wiki: www.headius.com/jrubywiki
- JRuby Extras: rubyforge.org/projects/jruby-extras
- RubySpec: www.headius.com/rubyspec
- Charlie's Blog: headius.blogspot.com
- Tom's Blog: bloglines.com/blog/ThomasEenebo

JRuby: Ruby for the Java Platform

Q/A

Thank You!

charles.nutter@sun.com

tom.enebo@sun.com