

# JUDCon

JBoss Users & Developers Conference

# 2012:India

# **JBoss Polyglot Revolution**

## **Be part of it! :)**

**Galder Zamarréño**  
Senior Software Engineer  
Red Hat, Inc

25th January 2012, Bangalore

# Galder Zamarrreño

- R&D Engineer, Red Hat Inc.
- Infinispan developer
- Over 10 years developing java apps
- Lately playing a lot with scala, python, ruby..
- Twitter: **@galderz**
- Blog: [zamarreno.com](http://zamarreno.com)

# Agenda

- JBoss as a java middleware producer
- Evolution into multi-language platforms
- JVM as runtime platform
- Lessons learnt
- Join the revolution!

# In the beginning...



~ = **Java MW**

JBoss produced mostly  
**Java only** middleware

# Why Java?



VM execution, automatic  
memory management, safe  
referencing, static typing,  
**readable, ...etc**

# First offering - EJBoss

An EJB open source  
implementation (1999)



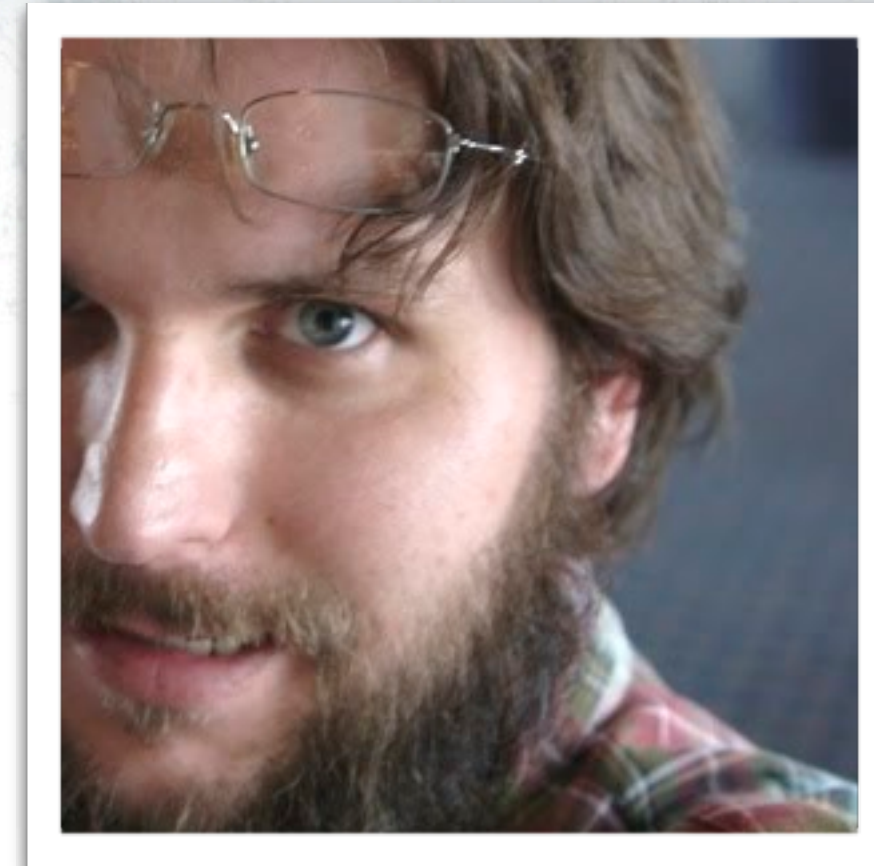
# More additions



ArjunaTS (Transactions)



# Bob McWhirter



A **Ruby on Rails** fan, used to run **JBoss.org**, but in **2008** he went back to development

# Ruby on Rails issues

Deployment of rails apps was sucky, and there were **scalability concerns** (i.e. Twitter)

# Why not Rails in Java?

**JQASBY** is Rails-happy...

# Deploy RoR on JBoss!

**Scheduled jobs,  
built-in clustering, messaging,  
platform independence,  
deploy without .war files...etc**

# Torquebox was born!

Deploy RoR on JBoss =



# Immutable

Take lessons learnt with



=

**Immutable**

# Mixing it up!

Infinispan = A lot of



with a little bit of





# Why Scala?



≈ =



**Just when you  
thought...**

# Ceylon



= A new language

deeply influenced by



# Why still like Java?



is easy and is robust

# Why Ceylon then?

No 1 Java problem:

**Defining user interfaces or structured data in a typesafe/hierarchical syntax not easy**

# **But there's more...**

**Outdated class libraries, lack of language level modularity, meta-programming is clumsy...etc**

# Ceylon goals

- Readability
- Predictability
- Toolability
- Modularity
- Metaprogrammability

# Why can these langs run in JVM?



# Binary class file format

**JVM knows nothing about Java lang, it only knows about the binary class file format**

# Dynamic langs in JVM

Pre JDK7, hacks required to get them working, but since JDK7 a new bytecode allows them to run much faster

# Lessons learnt so far in this revolution...

# AS7 rocks!!!

**JBoss AS7 is better suited for building middleware on top compared to predecessors**

# IDE integration is key!

IDE integration makes Scala  
a joy to work with and Ceylon  
has it as one its goals

# Join the revolution!



# Infinispan

# Immutable



# Summary

**JBoss started as Java  
middleware producer but has  
evolved to accommodate  
other languages**

# Summary

We've created a new language called **Ceylon** which targets **team development**



# Summary

JVM ready to accommodate other languages since day 1!

# Questions

<http://infinispan.org>

<http://torquebox.org/>

<http://ceylon-lang.org/>

<http://immutable.org/>

Rate this talk!

<http://speakerrate.com/galder>