

A Brief Introduction to Immutant

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Immutant is an application server for Clojure. Based on JBoss AS7, it provides a rich foundation for building non-trivial applications, including messaging, caching, jobs, clustering, and more. Immutant integrates with Leiningen. It is a sibling project to TorqueBox, and can be configured alongside TorqueBox in the same application server. This allows polyglot applications in Java, Clojure, and Ruby to be written and deployed within the same container.

1 What

slide:

Is this you?

Live in an enterprise?

Have a Clojure web app, and need

- multiple legacy database interop
- want messaging. for realz
- have a number of boxes, and want
- want something with a greater BAF (*) - Boss Acceptance Factor; YBMV - Your Boss May Vary

Or is this you?

- Not able to use Heroku or the ilk (too ala carte, too expensive, too inflexible), and raw EC2 is a little too. . . raw.
- Want scalability, load balancing, messaging, and/or scheduling
- have some Ruby web code you need to talk to

Then: Immutant is here to help <insert image of Gil>

Questions:

- Does it ~~blend~~ scale?
- How do you fit it in to your existing enterprise?

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2 Who

Jim Crossley, et al RedHat Project:odd

3 Why

If you've worked with Tomcat or other containers, you'll probably feel right at home.

Many enterprises are used to deploying this kind of thing and there's a pretty good chance they're already running Tomcat or JBoss.

~~W~~ife Boss acceptance factor.

~~B~~oss Ops acceptance factor.

RedHat!

4 How

Feature list for Immutant

5 Demo - A Quick Start

```
# Add {:plugins [[lein-immutant "0.14.1"]]}
$EDITOR ~/.lein/profiles.clj
lein immutant install 0.8.0
lein immutant run
# A bunch of output follows...
```

By default, it starts up messaging, scheduling, caching, and a Clojure environment.

It starts up several services, but by default it only listens on localhost, so no worries.

Port 8080 - web server. Port 9990 - JBoss management console.

6 Demo - Bringing in the web site

```
git clone git@github.com:chug/cljhouston.git chug
cd chug
lein immutant init
lein immutant run
```

```
# New window
$EDITOR src/immutant/init.clj
lein immutant deploy
open http://localhost:8080/cljhouston/
```

7 Demo - Adding a chatroom!?

```
# Add messaging dependency and new
$EDITOR src/immutant/init.clj
$EDITOR src/cljhouston/views/welcome.clj

curl -d message='Hello world!' http://localhost:8080/cljhouston/fritter
curl -d message='Hello world again!' http://localhost:8080/cljhouston/fritter
```

Todo:

- form for submitting
- date and IP of who added it
- bounded queue
- ajax

Seems kind of overkill, since we're just running in a single JVM. Can just use the atom. Or...

8 Demo - Spool up a cluster!