



*The Hitchhiker's
Guide to the
JBoss Galaxy*

“This must be Thursday.
I could never get the hang of Thursdays.”

— Douglas Adams

Why on earth would we need a guide?

(How big a galaxy could it be?)



OMG! It's a d@!* HUGE galaxy!

By Category

- AS - Application Server
Enterprise Application Platform
- ORM - Hibernate
Enterprise Application Platform
- Messaging - HornetQ
Enterprise Application Platform
- Cache - Infinispan
Data Grid
- Transactions - Narayana
Enterprise Application Platform
- ESB - Switchyard
- SOA Platform
- BPM - jBPM
BRMS
- Rules - Drools
BRMS
- Portal - GatoIn
Enterprise Portal Platform
- JAX-RS - RESTEasy
Enterprise Application Platform
- BPEL - Riftsaw
SOA Platform





JBoss Application Server 7



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Application Server

- The world's most popular Java EE application server
- Fast (< 3 seconds with an app)
- Smaller memory footprint
- New GUI Admin Console
- Modular core
- Domains
- CLI - command line interface
- www.jboss.org/as7
- Enterprise Application Platform



HIBERNATE

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by Red Hat



DON'T PANIC

Hibernate Family

- The world's most popular ORM solution
- ORM - object relational mapping - JPA 2 (JSR 317) - criteria query
- Search - “google” your data
- Validator - BeanValidation (JSR 303)
- Metamodel Generator
- OGM - JPA-like query of Infinispan
- www.jboss.org/hibernate
- Enterprise Application Platform (mostly)



RichFaces



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RichFaces



- The next generation JSF component framework and development kit
- JSF2 + RichFaces – JBoss and open source led many advancements to the EE6 specification, JSF 2.0 has had numerous enhancements such as Facelets, an XHTML-layout solution, built-in AJAX support (modeled on RichFace's A4J) and BeanValidation (lead by Emmanuel Bernard and Hibernate Validator). RichFaces 4.0 extends JSF 2.0 with not only numerous components such as trees, tabs and menus but also provides a Component Development Kit (CDK) to allow you to build your own custom extensions as well as integration with other EE specs like JMS and CDI. In addition, with RichFaces 4.0, we have made RichFaces & JSF ready for mobile web applications. <http://showcase.richfaces.org/>
- Supported in EAP 5 (RichFaces 3 WFK 1.x) & 6 (RichFaces 4 in WFK 2.0)
- www.jboss.org/richfaces





AeroGear

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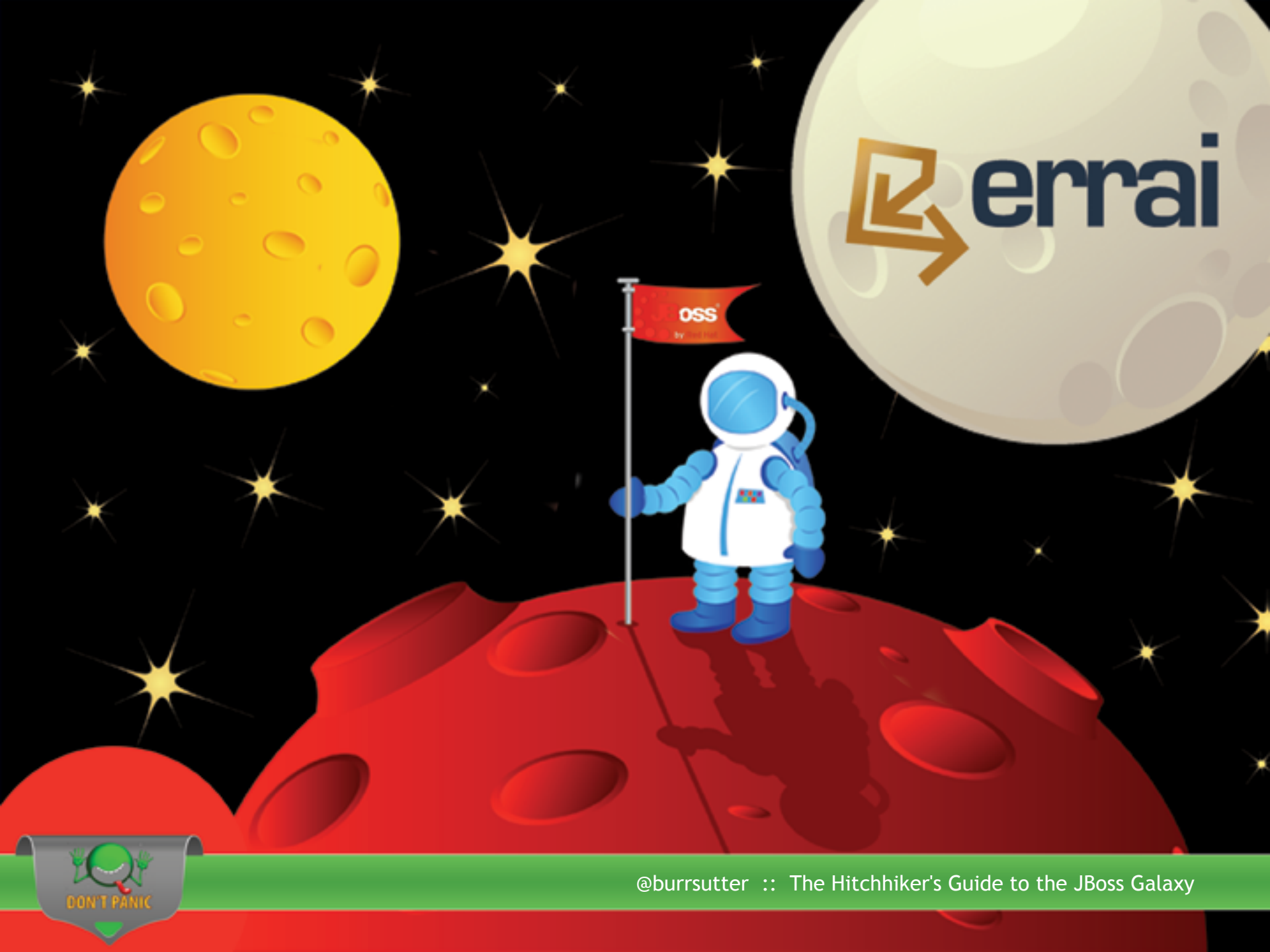


Aerogear



- Gear to get you mobile on JBoss
- HTML5 + Aerogear – HTML5 + CSS3 + JavaScript with libraries like jQuery/jQuery Mobile. POH5 – Plain Old HTML5 build your mobile and desktop applications using rich clients written in the browser’s native language and HTML5 introduces many new features for the average enterprise application such as: new form fields like email, websockets and local device storage. Aerogear is focused on community, innovation and education – bringing you the best examples, tutorials and techniques for building mobile web and hybrid/native apps on JBoss.
- Supported in WFK 2 (with EAP6)
- www.jboss.org/aerogear





 **errai**

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Errai

- Brings the power EE6 & CDI to Google Web Toolkit (GWT)
- GWT + Errai – GWT targets developers who are productive with Java, and wish to develop performant AJAXy applications with rich behaviour on the client side. GWT's Java-to-JavaScript compiler allows the Java developer to work with his normal editor (JBDS5/Eclipse), debugger and refactoring tools – to manage the large codebases that come with rich client development. Errai makes large maintainable rich clients a reality by extending GWT with the power of CDI, @Inject into browser/client code, a simple and flexible object marshalling facility, and over-the-wire CDI eventing for a loosely-coupled client-server application with high-performance bi-directional push, and shared code between client and server.
- Supported in WFK 2.0 (EAP6)
- www.jboss.org/errai

“A common mistake that people make when trying to design something completely foolproof is to underestimate the ingenuity of complete fools.”

— Douglas Adams

“The major difference between a thing that might go wrong and a thing that cannot possibly go wrong is that when a thing that cannot possibly go wrong goes wrong it usually turns out to be impossible to get at and repair.”

— Douglas Adams



Arquillian



Arquillian

- The missing link in Java EE development - automated integration testing from embedded to full blown clustered environments
- Arquillian is runnable from JUnit and TestNG but starts where unit tests leave off targeting the integration of application code inside a real runtime environment, compatibility testing between containers.
- Supported in JBDS 5 for EAP 6
- www.jboss.org/arquillian



BYTEMAN

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ByteMan

- Dynamic advice injection of new Java code directly into an applications running bytecode.
- You just hand it some Java code and ByteMan changes it. No compile cycle as ByteMan dynamically links and type checks all the code you supply. Your injected Java code can access any static or instance data and call any methods in scope at the injection point (including private data/methods) so it is easy to trace or collect stats on almost anything your app is doing.
- Supported? Not specifically, a utility that can work with any Java-based program
- www.jboss.org/byteman

Infinispan



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Infinispan



- Increase your scalability and high-availability by removing the bottleneck – your database.
- Infinispan is a data grid solution providing in-memory distributed storage. It is self-discovering and self-healing, so nodes can be added to and removed from a cluster without stopping the operation of the cluster.
- Supported in JDG 6
- www.jboss.org/infinispan



SWITCHYARD



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Switchyard



- Provides full lifecycle support for developing, deploying, and managing service-oriented applications
- EE6 CDI based service composition with @Service and @Inject
- BPMN2 based orchestration (via jBPM5)
- Apache Camel's EIP-based routing engine
- Pluggable Transformation support
- Supported in SOA Platform 6
- www.jboss.org/switchyard





ModeShape



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Modeshape

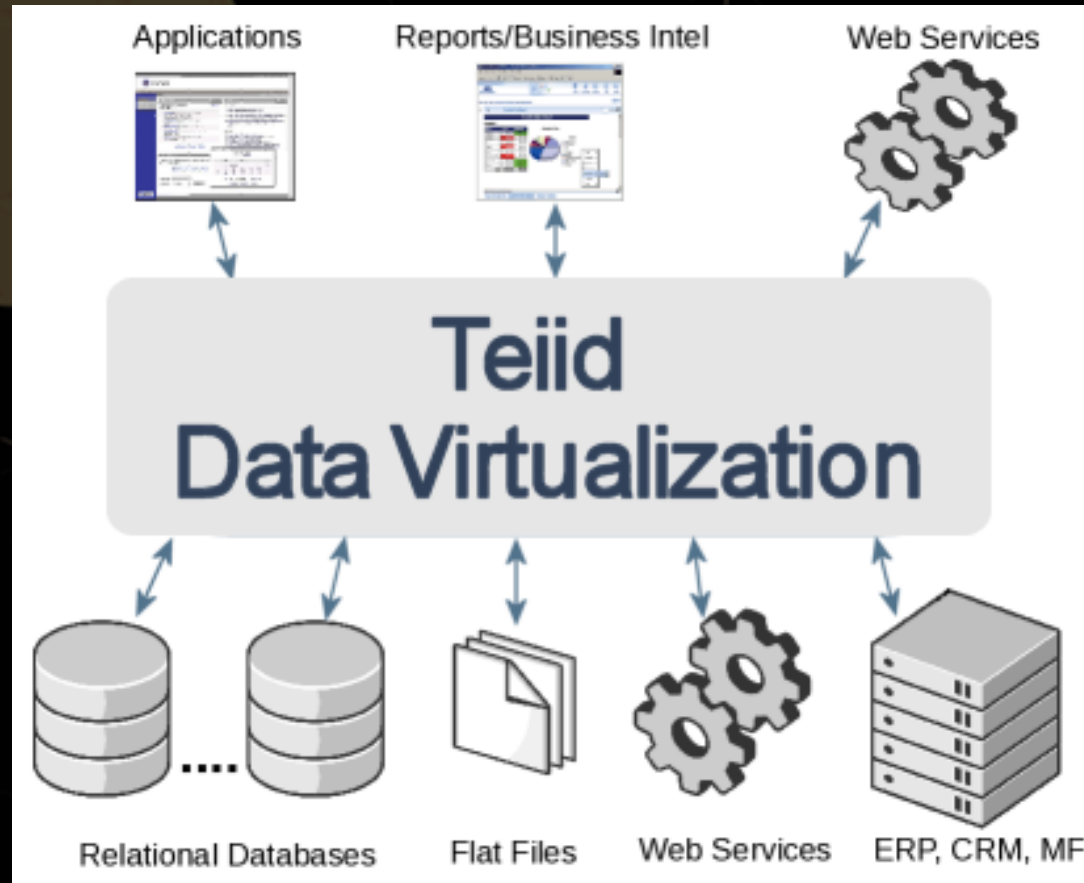


- Make your application “content driven” – a meta-repository
- Use ModeShape when your data:
 - Adapts and evolves with your application
 - Doesn't have or need a fixed schema
 - Is hierarchical and where navigation is important
 - Has (big) binary files and values
 - Needs aggregation & federation
 - ... and you wish to access it via JCR
- Supported in EDS
- www.jboss.org/modeshape





Teiid





tattletale



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Tattletale



- What does your app depend on?
- Ever received someone else's WAR or EAR and wanted to know the real dependencies?
- Ever shoved a bunch of JARs into your WEB-INF/lib to make the application compile but it was unclear why?
- Supported? Not at this time
- www.jboss.org/tattletale



“Human beings, who are almost unique in having the ability to learn from the experience of others, are also remarkable for their apparent disinclination to do so.”

— Douglas Adams

Drools

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Drools



- Declarative business logic – rules, processes and events
- Provides a unified and integrated platform for Rules, Workflow and Event Processing. It's been designed from the ground up so that each aspect is a first class citizen, with no compromises.
- Support? Mostly in BRMS 5.3
- www.jboss.org/drools



Drools
Fusion

Drools
Flow



Drools
Blip

Drools
Expert

Drools
Guvnor



Drools
Planner



“I love deadlines.
I love the whooshing sound
they make as they fly by.”

— Douglas Adams



JBPM

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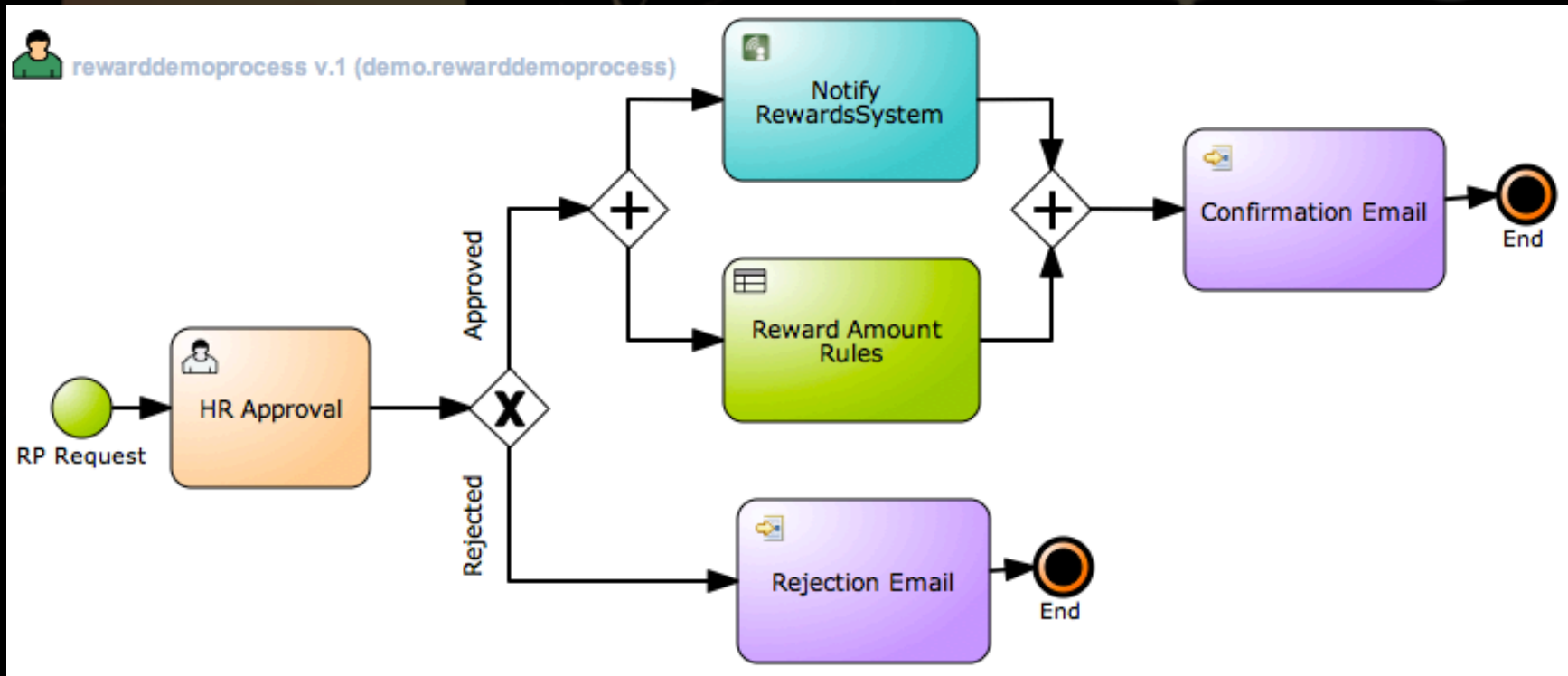


jBPM



- Visually model your business processes using BPMN 2.0, ready for execution
- Improves the visibility and agility of your business logic, results in higher level and domain-specific representations that can be understood by business users and is easier to monitor.
- Supported in BRMS 5.3 (jBPM 5)
- www.jboss.org/jbpm





TorqueBox



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TorqueBox



- Ruby on Rails on JBoss
- An application server for Ruby applications providing services such as load balancing, clustering, messaging, caching, scheduled jobs and daemons
- Supported - WFK 2 for EAP 6
- <http://torquebox.org/>





PicketLink



PicketLink



- Protect your world – enables you to implement enterprise SSO using SAML and WS-Trust
- Supported in EAP 6
- www.jboss.org/picketlink





IMMUTANT



Immutable



- Bringing Clojure to the Enterprise
- An application server for Clojure applications providing services such as load balancing, clustering, messaging, caching, scheduled jobs and daemons
- Supported? Not at this time
- <http://immutable.org/>





HornetQ



HornetQ



- 8.2 million messages per second with SpecJMS
- a multi-protocol, embeddable, very high performance, clustered, asynchronous messaging system.
- Supported in EAP
- www.jboss.org/hornetq





GateIn



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GateIn

- The Best of eXo and JBoss Portal – GateIn
- Best used when you wish to leave the layout, skinning, personalization, content-management, security/user management aspects of your business applications to the container.
- Supported as Enterprise Portal Platform
- www.jboss.org/gatein

REST Easy



RESTEasy



- Get RESTful with JAX-RS
- Provides various frameworks to help you build RESTful Web Services and RESTful Java applications. It is a fully certified and portable implementation of the JAX-RS specification
- Supported in EAP and SOA Platform
- www.jboss.org/resteasy



So Long (and thanks for all the fish)



Questions & Comments:

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