

JBoss Enterprise BRMS

OPEN SOURCE BUSINESS RULES MANAGEMENT SYSTEM

WHAT IS IT?

JBoss Enterprise BRMS is an open source business rules management system that enables easy business policy and rules development, access, and change management. A business rules management system helps an organization capture and manage business knowledge and policies. These business rules form the basis of decision-making in an organization.

WHAT DOES IT DO?

JBoss Enterprise BRMS includes a fast and highly efficient rules engine and easy-to-use rules development, management system, and repository. JBoss Enterprise BRMS makes it easy for a business analyst or auditor to view and manage your business rules as encoded in your IT application infrastructure. Business analysts as well as SOA and rules developers can verify that the encoded rules indeed implement the documented business policies. JBoss Enterprise BRMS also supports a variety of authoring and management consoles and language and decision table inputs, making it easy to quickly modify your business policies to respond to opportunities and competitive threats.

WHY SHOULD I CARE?

JBoss Enterprise BRMS allows businesses to reduce development time to update applications, SOA deployments, and business processes with the latest business rules and policies. This enables enterprises to respond to business environment changes and rapidly update their IT applications to feature new products and specials, offer current and relevant upsell offerings, and respond rapidly to competitive and business challenges. Something as simple as implementing new pricing scheme can be rolled into production in a matter of hours with little to no impact to the current application infrastructure.

OVERVIEW

IT organizations search for greater flexibility to improve business process agility. An agile application and business services portfolio is a key IT deliverable and one of the top focus items for businesses of all sizes. A more stringent regulatory environment drives IT departments to better manage critical business logic and rules, enabling superior business process automation and application and business process audit readiness. Achieving greater agility and transparency leads organizations to improve the modularity and accessibility of their business policies and rules by separating these from business processes and presentation logic into a business rules management system (BRMS).

Choose JBoss Enterprise BRMS, whether you require an embedded rules engine in a specific application or an enterprise-wide business rules infrastructure to support application development and deployment, automated business processes, and service-oriented architecture (SOA) deployments. With JBoss Enterprise BRMS, you can enable much more agile applications with rapid and easily modified business rules. It supports multiple rules development paradigms targeting business analysts, SOA developers, and Java application developers. It also adds flexibility to your Java application deployments and SOA implementations.

Examples where JBoss Enterprise BRMS may add significant value to an enterprise or government agency include:

- **Resource allocation and prioritization**
- **Product configuration** – Handling complex product feature interdependencies
- **Pricing and electronic trading** – Applying algorithms to live pricing information
- **Insurance** – Assessing the premium level for new and changed customers
- **Network security and monitoring** – Intelligently assessing traffic for malicious intent; smart alerts and control actions

- **Authorization** – Performing functions like determining user permissions
- **Control systems** – Regulating systems like air conditioning and heating
- **Healthcare** – Assessing drug interactions; prescription assistance
- **Government** – Evaluating and approving benefits, such as social security, unemployment, and welfare; fraud detection

Application simplification and agility

Business rules management systems simplify applications by separating business policy or rules logic from process, infrastructure, and presentation logic. This modularity enables business analysts, rules developers, and auditors to develop, deploy, modify, and manage a business process's rules with much greater ease and speed. When a company wants to run a one-week special, for example, all they have to do is modify the pricing or offering rules associated with a particular product and service, and deploy to the JBoss Enterprise BRMS. Then the special offering is up and running. There is no need to modify code nor rebuild the application. It is that simple.

Transparency

With the business rules separated from other business and presentation logic, it becomes far easier for business analysts and auditors to ensure that the encoded business rules indeed implement the business policies precisely and help them meet the newer, more stringent regulatory environment as driven by acts like Sarbanes-Oxley, Basel, and HIPAA.

Efficient and scalable

JBoss Enterprise BRMS is a great way to collect complex decision-making logic and work with data sets too large for humans to effectively use. The JBoss rules engine included with JBoss Enterprise BRMS can make decisions based on hundreds of thousands of facts quickly, reliably, and repeatedly. It works by decomposing large sets of rules into a very efficient network of nodes that can process and react to facts far more efficiently than can be programmed manually. JBoss Enterprise BRMS scales extremely well with increases in the number of rules and facts.

Knowledge base and transfer

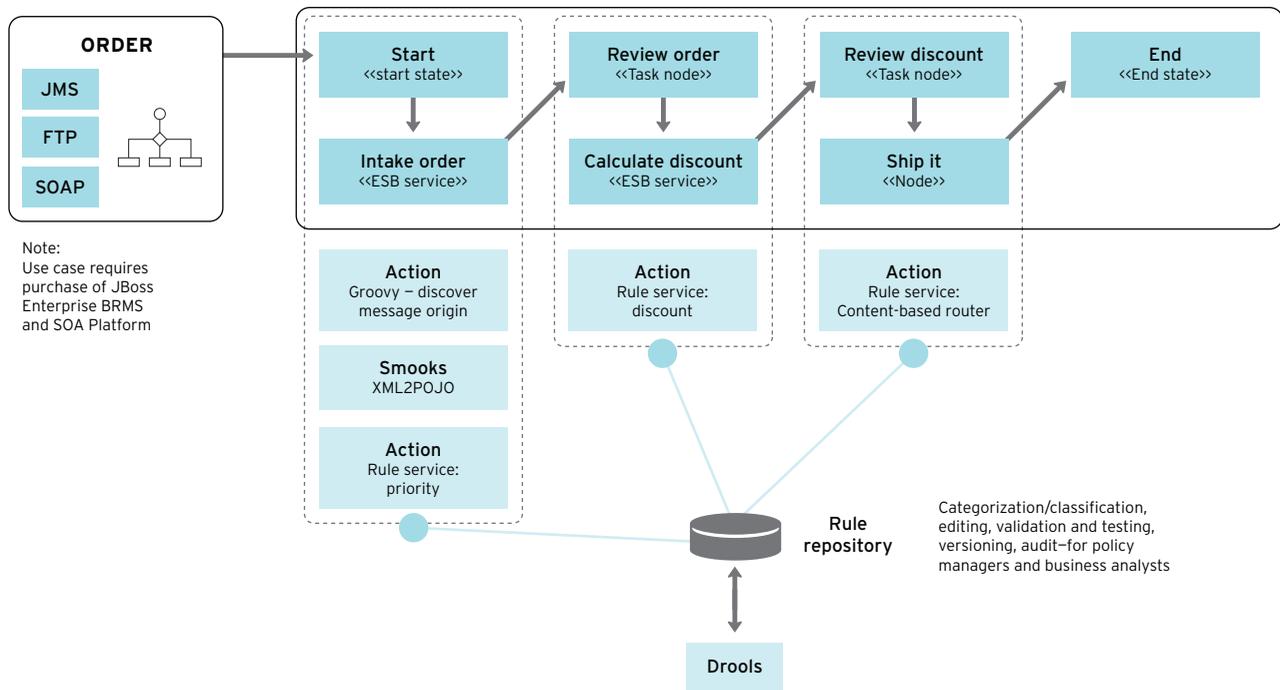
Rule engines facilitate knowledge transfer to centralized repositories and help combat issues due to the loss of key decision makers, managers, executives, specialists, and highly creative employees from normal turnover rates and aging populations. This loss of knowledge can cripple small businesses and organizations and seriously hamper the efforts of medium-sized companies or divisions of large companies. JBoss Enterprise BRMS mitigates these risks by centralizing key knowledge in the rules repository.

Reusability across applications and SOA

Once your business rules are separated from other logic, they can be more easily reused across many applications and in service-oriented architecture environments. This also provides the added benefits of business agility and giving the same answers for the same inputs to all applications and users. JBoss Enterprise BRMS is a key component of JBoss Enterprise Middleware and delivers this benefit to businesses.



FIGURE 1. JBOSS ENTERPRISE BRMS IN ACTION IN AN SOA DEPLOYMENT AUTOMATING ORDER PROCESSING



JBOSS ENTERPRISE BRMS FEATURES

- **Business rules engine** – The JBoss Enterprise BRMS engine implements the full Rete algorithm with high-performance indexing and optimization. The runtime supports dynamic rules addition and removal. JBoss Enterprise BRMS supports temporal rules, which are fired within specified time periods or constraints. A complete event model provides execution audit logging for regulatory compliance support and business event tracking and management.
- **Authoring** – The new, rich authoring interface of JBoss Enterprise BRMS enables fast and easy rules development, change, and management for process owners, administrators, and business analysts.

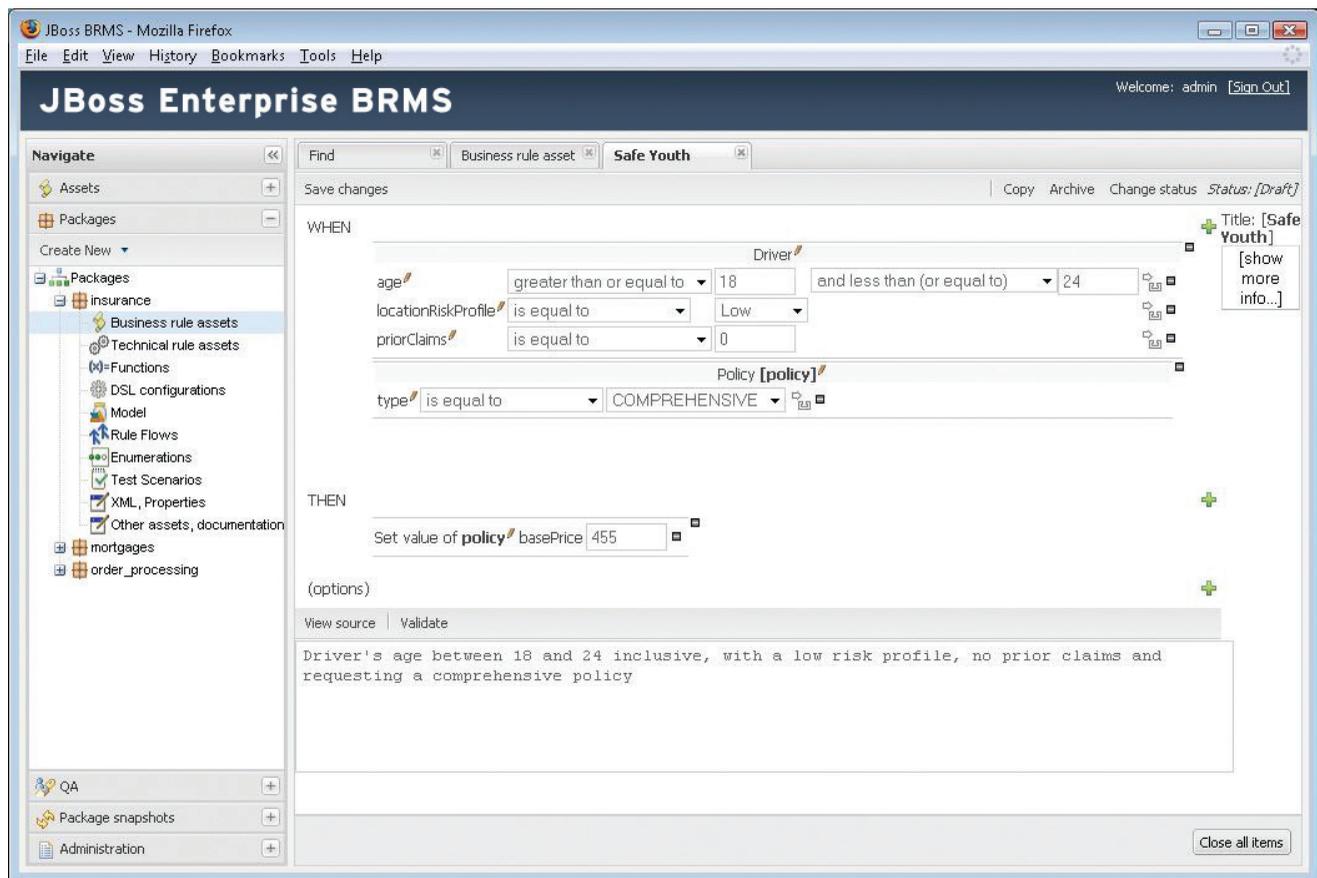
For Java developers, the Drools Rule Language (DRL) supports all the previously mentioned features and uses Java to express field constraints, functions, and consequences. DRL is extendable and provides support for natural language through a mapping properties file. Both the standard DRL and natural language (domain-specific language) extensions are supported by JBoss Enterprise BRMS Workbench. Users may also author decision tables using Microsoft Excel or OpenOffice.

The JBoss Enterprise BRMS Workbench IDE, part of JBoss Developer Studio, includes syntax coloring, code completion, an outline view, and basic rule validation. Error reporting, debugging, Rete viewer, and audit viewer expose all the internals of the runtime engine.

- **Management** – JBoss Enterprise BRMS includes a business rules management repository and web-based administration console to help business analysts, developers, administrators, and other users of JBoss Enterprise BRMS with managing their rules within the application and SOA deployments. A business rules repository provides the basis for storing and managing business rules with the BRMS. The BRMS includes

support for categories of rules to help organize business rules. Assets are rules, groups of rules, or a decision table that are to be managed as one entity. Multiple versions of assets can be managed. Packages are like a folder of rules and offer a simple way to manage smaller groups of rules. Status management allows administrators to flag rules as drafts or deployment-ready both at the asset and package levels.

FIGURE 2. JBOSS ENTERPRISE BRMS WEB 2.0 RULES EDITOR



ENTERPRISE-CLASS RELIABILITY AND SCALABILITY

Along with supporting business rules in Java applications and SOA deployments, JBoss Enterprise BRMS is deployed with JBoss Enterprise Application Platform or JBoss Enterprise SOA Platform. These products give a proven foundation for applications and integrations that require superior performance and scalability. The high-availability services of JBoss Enterprise Application or SOA Platform provide the clustering, caching, failover, load balancing, and distributed deployment features expected in a best-of-breed BRMS platform.

Additionally, the JBoss business rule engine (BRE) included with the JBoss Enterprise BRMS may be deployed in stand-alone mode (J2SE) or on other application servers, such as WebLogic Server or WebSphere Application Server, in a distributed application or SOA environment. The BRMS can manage the entire JBoss Rules distributed deployment.

JBoss ENTERPRISE FRAMEWORK SUBSCRIPTION BENEFITS

Subscriptions to JBoss Enterprise Middleware are not just an outstanding value, they are also easy to purchase and consume. Sold in both 4- and 32-CPU units, all JBoss Enterprise Middleware production subscriptions include:

- **Product access:** Source and binary code, documentation
- **Updates:** Regular updates that provide general enhancements, new features, etc.
- **Revisions:** Access to the latest bug fixes and security errata
- **Upgrades:** Rights to new versions of JBoss Enterprise Middleware released during the subscription lifetime
- **Flexibility:** Subscriptions are not version-specific, so access to and support for previous versions is included
- **JBoss Customer Support Portal:** Connect directly to JBoss support staff, open and track support cases in real-time, customize patch or upgrade alerts, and download certified patches and updates
- **Support:** Multiple support services providing unlimited incidents and coverage up to 24x7 with one-hour response
- **Long-term stability:** Multi-year support and update policies for all JBoss Enterprise Middleware
- **Legal assurance:** The Red Hat Open Source Assurance program safeguards customers who are developing and deploying open source solutions from legal harm

Subscriptions of 32 CPUs or greater include additional value-add features, including JBoss Operations Network and Developer Professional Subscriptions. For subscriptions totaling fewer than 32 CPUs, both JBoss Operations Network and Developer Subscriptions may be purchased separately.

For more information on the full range of JBoss Enterprise Middleware and Red Hat Developer Subscriptions, please visit redhat.com/JBoss or contact your Red Hat sales representative.



PLATFORM AND STANDARDS SUPPORT

Minimum system requirements

For rules engine deployments:

- JDK 1.5 or higher
- 512 MB RAM
- 50 MB hard disk space
- 400 MHz CPU

For the full BRMS:

- JDK 1.5 or higher
- 1.0 GB RAM
- 200 MB hard disk space
- 400 MHz CPU

Supported operating systems

JBoss Enterprise BRMS is 100% pure Java and therefore interoperable with most operating systems capable of running a Java Virtual Machine (JVM), including Windows, UNIX, and Linux.

Supported standards

- Java Rule Engine API (JSR-94)
- Java 5 compliance

JBoss SALES AND INQUIRIES NORTH AMERICA

1-888-REDHAT1
www.jboss.com

