JBOSS ENTERPRISE APPLICATION PLATFORM

WHAT IS IT?

JBoss Enterprise Application Platform is the industry-leading platform for next-generation enterprise Java applications. It provides a stable, open source foundation for highly transactional Java applications and services. And it's integrated, simplified, and delivered by Red Hat, the leader in enterprise open source software.

WHAT DOES IT DO?

By combining market-leading technologies into a single, simple, and flexible solution, JBoss Enterprise Application Platform makes it easy to develop, deploy, and manage Java Enterprise Edition (EE) applications. It includes leading open source technologies for building, deploying, and hosting enterprise Java applications in dynamic environments. JBoss Enterprise Application Platform provides a stable and consistent enterprise Java foundation that supports a variety of popular programming models and deployment options, spanning traditional application deployments to on- and off-premise cloud deployments.

WHY SHOULD I CARE?

JBoss Enterprise Application Platform balances innovation with enterprise-class stability. By integrating and certifying the most popular Java application server on the market with next-generation application frameworks, it removes complexities from enterprise Java development and deployment. JBoss Enterprise Application platform includes high-availability features and comprehensive administrative tooling to support, manage, and scale out mission-critical enterprise Java applications. By including all of the technologies needed for enterprise Java deployments in a single subscription, JBoss Enterprise Application Platform provides a stable platform that simplifies the development and management of next-generation Java applications and services. Red Hat customers take advantage of affordable JBoss Enterprise Application Platform subscriptions to help extend their companies' middleware budgets and improve their total costs of ownership.

OVERVIEW

JBoss Enterprise Application Platform is one of three application server runtime platforms that form Red Hat's solutions for building and deploying Java applications and services. Targeting highly transactional applications that leverage the Java EE programming model, JBoss Enterprise Application Platform integrates enterprise versions of popular open source technologies that make it simpler and easier to build and manage high-performing Java EE applications.

Whether you're switching to a more flexible, standards-based environment or building next-generation applications and services, JBoss Enterprise Application Platform gives you industry-leading technologies for enterprise applications, all integrated into a single, scalable Java application server at a fraction of the cost of traditional Java EE offerings. JBoss Enterprise Application Platform includes integrated features for clustering, caching, messaging, and transactions and a full web services stack to support a wide variety of enterprise Java application deployments.

At its foundation is an enterprise-class version of the market-leading JBoss Application Server, integrated along with popular application frameworks, including Hibernate, the industry-leading technology for object/relational mapping and persistence, and Seam, the popular framework for seamlessly integrating rich web technologies into enterprise applications. JBoss Enterprise Application Platform also includes JBoss Web Framework Kit to provide enterprise versions of popular open source application frameworks, such as Google Web ToolKit, RichFaces, Struts, and Spring, that help support rapid development of rich web applications.

JBoss Enterprise Application Platform provides a stable and consistent foundation to support the variety of popular Java programming styles that span the growing choice of operating environments, from traditional application deployment models, to internal and external cloud-based deployments. Built with a strict adherence to open standards, backed with a long-term enterprise product lifecycle, and available through flexible and affordable subscriptions, JBoss Enterprise Application Platform includes everything you need to build and manage rich and highly transactional enterprise Java applications.

BENEFITS

Choice without compromise. Support the variety of popular programming choices and deployment styles on a single, flexible Java application platform—without compromising on operational stability. Enterprise services for clustering, caching, web services, security, messaging, and transactions can be easily configured and customized across a selection of supported programming styles (POJOs, Java EE, Spring) and frameworks to support all of the common types of enterprise Java applications from a single runtime platform.

Innovation with stability. Benefit from the latest open source innovations that have been tested and certified for enterprise-class stability on a combination of leading operating systems, chip architectures, and databases. With a long-term product support lifecycle and backed with an extensive partner ecosystem of certified independent software vendors (ISVs), JBoss Enterprise Application Platform provides a stable and supportable platform for any mission-critical Java application.

Build applications faster. Take advantage of rich web technologies and popular developer productivity frameworks that work together from the start. Remove library configuration complexities and conflicts. Simplify enterprise Java development with a flexible and easy-to-use application platform. JBoss Enterprise Application Platform, combined with JBoss Developer Studio, provides a fully integrated development environment that helps improve developer productivity throughout the entire application development lifecycle.

Standard and flexible. Develop and deploy on an enterprise Java platform that implements industry standards in a flexible and open way. Delivered as a 100% pure Java open source solution, JBoss Enterprise Application Platform provides you with absolute transparency to see exactly what's happening in your enterprise application server. Customize configurations, tune applications, and take advantage of unparalleled flexibility by seeing exactly how your software is implementing standards, enterprise features, and application server functionality.

Extend your budget. Reduce capital expenses and free up operating costs by leveraging an affordable solution that includes everything you need for enterprise Java applications. With productivity tools for both developers and administrators, JBoss Enterprise Application Platform gives you a stable and reliable platform and keeps middleware costs predictable, lowering your total cost of application ownership.

JBOSS ENTERPRISE APPLICATION PLATFORM 5 FEATURES

Enterprise-class performance & scalability. Take advantage of integrated clustering and high-availability features for superior application performance. With built-in features for failover, caching, intelligent load balancing, and distributed deployment, JBoss Enterprise Application Platform is a proven foundation for highly scalable Java applications in mission-critical environments.

Second-generation, service-based architecture. JBoss Enterprise Application Platform is built on top of the innovative JBoss Microcontainer architecture to provide improved class-loading, performance, lifecycle management, and flexibility across a wide variety of programming and component models including Java EE, POJOs, OSGi, and Spring. The Microcontainer lets you separate enterprise services from the core application server runtime engine to deliver a highly configurable and flexible Java application platform without compromising operational stability.

Integrated frameworks. JBoss Enterprise Application Platform features industry-leading frameworks for building rich Internet applications and integrating all of the technologies required to build common types of Java applications, from simple web apps to highly transactional Java EE applications and everything in between. Stable, enterprise-grade versions of each framework are integrated, certified, and kept up to date as part the JBoss Enterprise Application Platform product lifecycle, ensuring both development and deployment platforms are in operationally in sync.

Enhanced application security. Targeted at meeting rigorous industry security requirements, such as Common Criteria, JBoss Enterprise Application Platform implements all of the required Java security standards and more. In addition to being backed by Red Hat's security response process, JBoss Enterprise Application Platform includes features for password masking, instance-based access control, security negotiation, audit, and integration support with common single sign-on solutions to help IT organizations maintain a safe and secure middleware environment.

Simplify application management and configuration. With JBoss Enterprise Application Platform's administration console, spend less time configuring and managing application and application server settings. Through its rich embedded user interface, developers and administrators can easily adjust configuration settings, execute controls, and drill into application performance metrics. For enterprise-wide management, leverage JBoss Operations Network to control, administer, and proactively manage all of your development, testing, and deployment environments.

JBOSS ENTERPRISE APPLICATION PLATFORM 5 COMPONENTS

JBoss Enterprise Application Platform is a Java Enterprise Edition (EE) application server platform. It includes default configurations for both development and production use and is performance-tuned from the start for highly transactional applications in mission-critical environments. Delivered as a single integrated distribution, JBoss Enterprise Application Platform includes enterprise versions of:

- JBoss Application Server, the most widely used Java application server on the market. In addition to being a certified Java EE 5 platform, it also provides support for a variety of popular programming and component models, like POJOs and Spring. Featuring a set of highly flexible and configurable enterprise services for caching, clustering, messaging, transactions, and security, as well as support for a comprehensive web services stack, JBoss Application Server supports all types of enterprise Java applications.

- Hibernate, the leading object/relational mapping and persistence (ORM) framework. Hibernate directly addresses enterprise Java complexities by providing the ability to easily map an object model's data representation to a relational data model and corresponding database schema. Hibernate also provides data query and retrieval facilities that significantly reduce development time and help eliminate the need for manual, hand-crafted data processing using SQL and JDBC.

- Seam, a powerful application framework that simplifies building next-generation web applications. Seam supports a streamlined programming model and helps overcome common framework integration issues. Seam helps unify technologies such as Asynchronous JavaScript and XML (AJAX), Java Server Faces (JSF), Enterprise Java Beans (EJB 3), Java Portlets and business process management (BPM) through a standardized approach.

- JBoss Web Framework Kit includes popular web frameworks for quickly and easily building light and rich Java applications. By combining leading rich application frameworks—Google Web Toolkit and RichFaces—with popular Java frameworks—Spring and Apache Struts—JBoss Web Framework Kit provides an enterprise with a certified way to adopt popular open source frameworks on JBoss Enterprise Middleware.

ADDITIONAL SOLUTIONS FOR JAVA APPLICATIONS

Round out your JBoss Enterprise Application Platform sub-scription with solutions for lighter enterprise Java applications and productivity tools targeted at both developers and middleware administrators:

- JBoss Enterprise Web Server. For simple web applications and the lightest Java workloads, JBoss Enterprise Web Server provides a stable, long-term, enterprise product support lifecycle for Apache Web Server, Apache Tomcat, and all of the common connectors used in between.

- JBoss Developer Studio. Red Hat's innovative Eclipse-based developer tool that provides a single integrated development environment for all JBoss platforms, JBoss Developer Studio includes both tooling and an integrated version of the certified application platform runtime.

- JBoss Operations Network. Red Hat's comprehensive middleware management solution gives IT operations a single, centralized easy to use graphical management and administration tool for all types of Java application workloads. With JBoss Operations Network, companies can inventory resources from operating systems to applications; control and audit application configurations; standardize deployments; and manage, monitor, and tune applications for improved visibility, performance, and availability.

PLATFORM AND STANDARDS SUPPORT

JBoss Enterprise Application Platform 5

Minimum system requirements

- JDK 1.6
- 512 MB RAM
- 100 MB hard disk space
- 400 MHz CPU

Supported JDKs

- Sun JDK 1.6
- OpenJDK 1.6
- IBM JDK 1.6

Supported operating systems

JBoss Enterprise Application Platform is 100% pure Java. It is supported on any operating system, including Red Hat Enterprise Linux, Windows, and UNIX, as long as a supported JDK is used.

Supported databases

JBoss Enterprise Application Platform is supported with any JDBC compliant database. Each release is certified with IBM DB2, Oracle, Microsoft, MySQL, PostgreSQL, and Sybase databases.

Supported standards

JBoss Enterprise Application Platform supports the following standards:

- Java Enterprise Edition 5, including:
  - Java Servlet 2.5, JavaServer Faces (JSF) 1.2
  - JavaServer Pages (JSP) 2.1
  - Java Transaction API (JTA) 1.1
  - Enterprise Java Beans (EJB) 2.1, 3.0
  - Java Messaging Service (JMS) 1.1
  - Java Persistence API (JPA) 1.0
  - Web Services Metadata for the Java Platform 2.0 (JSR 181)
  - Java API for XML Web Services (JAX-WS) 2.1
  - Java Architecture for XML Binding (JAXB) 2.0
  - Java API for RESTful Web Services (JAX-RS) 1.0
- Web services standards
  - Simple Object Access Protocol (SOAP) 1.2
  - SOAP Message Transmission Optimization Mechanism (MTOM)
  - XML-Binary Optimized Packaging (XOP)
  - Web Services Description Language (WSDL) 1.1, 2.0
  - WS-I Basic Profile 1.1
  - WS-Addressing 1.0
  - WS-Security 1.1
  - UDDI 2.0
  - Java API for XML Web Services Addressing (JAX-WSA) 1.0
  - WS-Atomic Transactions 1.1
  - Fast Infoset
  - WS-Business Activity 1.1
  - WS-Coordination 1.1
  - WS-Security Policy 1.3
  - WS-I Attachments Profile 1.0

- Additional standards
  - Java Transaction Service (JTS) 1.0
  - CORBA 2.3.1
  - JDBC 3.0
  - SPNEGO / Kerberos

SUBSCRIPTION BENEFITS

Red Hat provides software subscriptions to JBoss Enterprise Middleware products that provides users with ongoing value throughout the entire subscription term. Features and benefits of the JBoss Enterprise Middleware subscription include:

- **Predictability:** subscriptions are offered on an annual basis and include access to new versions at no additional cost; there are no large upfront license fees or hidden costs.
- **Integrated & certified enterprise platforms**: access to enterprise open source middleware platforms, in source and binary form, along with enterprise product documentation specific to each product release.
- **Upgrades and updates:** regular product updates that provide enhancements, new features, new platform certifications, and access to the latest defect and security fixes.
- **Security Response:** subscriptions come with Red Hat's industry recognized security response process to help customers proactively address potential security issues in their environment.
- **Long-term Stability:** each JBoss Enterprise Middleware product has a defined multi-year product life cycle with strict update policies that maintain application stability and compatibility for the long-term.
- **World-class technical support:** unlimited incident support by the experts in open source middleware with coverage up to 24x7 with 1 hour response for critical issues.
- **Red Hat Customer Portal Access:** a single portal for accessing all of the benefits of a Red Hat subscription such as enterprise software delivery, product updates &

critical issue notifications, knowledgebase access, and case management.

- **Partner Certifications:** deploy solutions with confidence that your enterprise middleware is fully certified by leading Red Hat ISV partners.

- **Legal Assurance:** the Red Hat Open Source Assurance program safeguards customers who are developing and deploying open source solutions from legal harm.

SUBSCRIPTION SIZING

Subscriptions to JBoss Enterprise Middleware products are provided in a virtualization friendly model, consumed in increments of 16 and/or 64 Processor Core Bands, and backed by a choice of enterprise service levels that support any type of mission critical deployment. Key features of the JBoss consumption model include:

- Processor Cores can be virtual or physical, making them ideally suited for the growing trend toward virtualizing middleware workloads.

- Customers are free to choose the types of processor cores that make sense for their environment; different types of processor cores are treated the same.

- Technical support covers issues across the entire application life-cycle, from development to deployment management, across any supported environment.

- A subscription for any individual JBoss product includes development use for all of the products in the JBoss Enterprise Middleware portfolio.

- To learn more about sizing your JBoss Enterprise Middleware environment, read the Red Hat Subscription Guide For JBoss Enterprise Middleware.

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TRAINING AND ASSISTANCE

Red Hat and its certified partners offer a range of services for JBoss Enterprise Middleware solutions, including:

- Developer support: Expert advice spanning architecture, design, configuration, optimization, and tuning recommendations.

- Technical account manager: In addition to delivering Standard and Premium support options, Red Hat offers support services with enhanced options targeted at customers who desire the deepest technical relationship with Red Hat.

- Training and certification: A full curriculum of courses for JBoss Enterprise Middleware solutions for both developers and operations-focused roles.

- Consulting: A wide range of consulting services, from small deployments to complete design, deployment, integration, migration, management services are available from Red Hat and it's certified partners.

For more information on the full range of JBoss Enterprise Middleware subscriptions, training, and services, please visit jboss.com or contact your Red Hat account manager.

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