DEPLOY ANYWHERE WITH RED HAT JBOSS ENTERPRISE APPLICATION PLATFORM

DATASHEET

FEATURES

- Fully certified Java EE 7 and Java SE 8 support

- Full web services stack

- Modular architecture optimized for containers and cloud deployments

- Enterprise capabilities such as failover, distributed caching, intelligent load balancing, clustering, and distributed deployment

- Integrated developer environment that maximizes productivity and performance

BENEFITS

- Deploy new business value faster with accelerated time-to-market

- Boosted developer productivity

- Flexible manageability

- Fully supported Java EE development and deployment in any environment

- Quickly reinvent and update your systems of engagement

THE CHALLENGE

Today, your applications determine whether your organization can successfully compete against your competitors. You must develop and deploy innovative applications faster than ever before, creating greater demands on your development resources. Implementing DevOps, microservices architectures, and containers can help you quickly deliver higher-quality applications that meet the demands of web-scale performance. However, accommodating these modern approaches also means you must rethink your choice of architectures, processes, and technology platforms.

You need an application development platform that supports continuous development, testing, and deployment of secure Java™ Enterprise Edition (Java EE) applications in any environment—on-premise, in the cloud, or hybrid—while enabling the use of whichever architectures and development processes best position you in front of your competition.

PRODUCT OVERVIEW

Red Hat® JBoss® Enterprise Application Platform 7 (JBoss EAP) is the market-leading open source platform for modern Java applications deployed in any environment.[1] JBoss EAP's architecture is innovative, modular, and cloud ready. The platform offers powerful management and automation for greater developer productivity. It is based on the open source Wildfly project (formerly known as JBoss Application Server).

JBoss EAP offers features such as:

- High availability clustering.

- Distributed caching.

- Messaging.

- Transactions.

- A full web services stack.

As a result, JBoss EAP is well-suited for organizations with demanding reliability, security, and compliance requirements that need developer-friendly technology, high productivity, and flexible deployment. Organizations that use JBoss EAP can fully support a wide range of Java applications, from HTML5 mobile applications to microservices apps to highly transactional applications that use the Java EE programming approach. JBoss EAP helps organizations deliver business value more quickly and with greater flexibility, resulting in lower costs, fast and easy scale-out, and reduced IT complexity.

RED HAT JBOSS ENTERPRISE APPLICATION PLATFORM

Integrated development environment
Live reloading, source control integration, debugging, memory analyzer, integration testing, OpenShift tooling, visual editor, mobile tooling, etc.

Certified Java EE application server
Web server, clustering, transaction messaging, batch processing, security websocket, REST, web services, etc.

Management
Administration, configuration, management, patching, monitoring, provisioning, etc.

1 *2013 Gartner Magic Quadrant for On-Premises Application Platforms*

FEATURES AND BENEFITS

JAVA CAPABILITIES FOR CONTAINERS AND THE CLOUD

JBoss EAP offers full support and deployment flexibility for Java EE in modern application environments – whether they are on-premise, virtual, or hybrid cloud. It has been optimized for cloud environments such as OpenShift by Red Hat, Microsoft Azure, and Amazon Web Services.

Its ability to meet requirements that span from traditional applications to new web-scale microservices apps means that organizations that standardize on JBoss EAP can gain the flexibility needed to build applications to fit their business needs.[2]

JBoss EAP 7 is:

- **An application platform based on flexible, modular architecture** that features services-driven components. It simplifies application deployment in different environments.

- **Well-suited for microservices, as well as traditional applications.**

- **Highly efficient and optimized for container and cloud deployments**, offering an extremely low memory footprint, fast startup times, efficient resource utilization, reduced port usage, and management and monitoring over HTTP (REST).

- **Resource-efficient scale-out** that supports your application as it evolves and grows by offering high-density deployment options and dynamic scaling.

DEVOPS PRODUCTIVITY AND CONTINUOUS DELIVERY

Using Red Hat JBoss Enterprise Application Platform with common DevOps tools helps you maximize development and operations teams' productivity, decrease quality issues, and get new apps to market fast.

JBoss EAP allows developers to:

- **Prototype quickly** with JBoss EAP and OpenShift Enterprise by Red Hat. In OpenShift Enterprise cloud environments, organizations can boost productivity and innovate faster with features like self-service application provisioning, simplified stack management, and application auto-scaling.

- **Benefit from continuous test and integration technologies** such as Arquillian for integration testing, Maven for automated and managed build processes, and Jenkins for continuous integration.

- **Build applications integrated with popular Java EE 7 web-based frameworks**, including Spring, Spring Web Flow, Spring WS, Spring Security, Arquillian, AngularJS, jQuery, jQuery Mobile, and Google Web Toolkit (GWT).

---

2 *https://www.redhat.com/en/resources/idc-whitepaper-value-jboss-eap*

FLEXIBLE MANAGEABILITY AND UNIFIED ADMINISTRATION

JBoss EAP makes it easy to efficiently maintain and update Java EE deployments of any scale. JBoss EAP features an updated management console that includes intuitive navigation and support for large-scale domain configurations.

In addition, management via the updated command-line interface (CLI) provides administrators with a quick, unified view into configurations and subsystems, while offering the ability to manage servers offline. The CLI can be used with popular configuration management tools, such as Ansible Tower by Red Hat or Puppet. Together, the management console and CLI make editing XML configuration files unnecessary. With JBoss EAP, administrators can also now perform minimally disruptive maintenance on servers using the new server suspend mode.

ENTERPRISE PERFORMANCE AND STABILITY

JBoss EAP is performance-tuned for highly transactional applications, allowing you to innovate while simultaneously meeting strict compliance, security, and regulatory requirements.

JBoss EAP architecture and high-performance features help organizations meet the most demanding performance requirements, including:

- **A diverse range of Java application requirements.** The combination of Java EE 7 compliance, integration with the latest open standards, and the addition of capabilities such as failover, high-availability clustering, distributed caching, intelligent load balancing, and distributed deployment.

- **Throughput and scalability for environments with millions of connections.** Undertow, a highly scalable, nonblocking I/O (NIO) web server, offers maximum throughput and scalability. Undertow can also be configured to function as a multiplatform load balancer.

- **Latency reduction and load-time improvement.** Support for HTTP/2 standards (which are in technical preview for JBoss EAP 7) compresses headers and multiplexes data streams over a single Transmission Control Protocol (TCP) connection. HTTP/2 also allows servers to push resources to the client before it has requested them, leading to faster page loads.

MOVING TO JBOSS EAP

FROM IBM WEBSPHERE OR ORACLE WEBLOGIC APP SERVERS

Organizations moving to JBoss EAP have achieved a 509% return on investment over three years, while developing 70% more applications per year with 35.5% fewer developer hours per application.[3] Engage Red Hat Consulting to help make the move from IBM WebSphere or Oracle WebLogic application servers to JBoss EAP. Red Hat Consulting has a full complement of migration offerings to help you make the move, including methodology, tooling, and migration factory services.
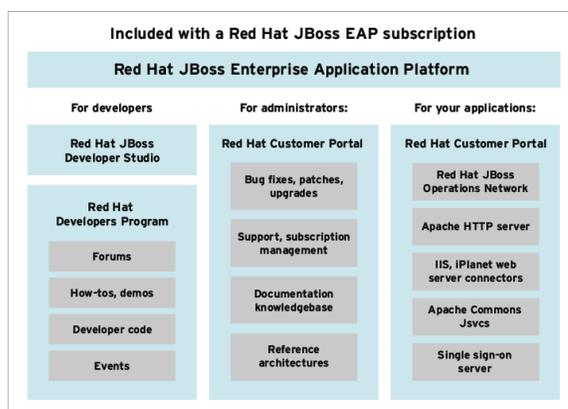
---

3 *https://www.redhat.com/en/resources/idc-whitepaper-value-jboss-eap*

UPGRADE SUPPORT, INCLUDING INTEROPERABILITY

For JBoss EAP 7, migration operations help you quickly upgrade from older versions of JBoss EAP or Wildfly. JBoss EAP 7 provides interoperability with existing JBoss EAP 6 environments with improved protocol version support and tooling. The new messaging subsystem is based on Red Hat's unified messaging technology, Apache ActiveMQ Artemis. ActiveMQ Artemis enables you to pass messages between JBoss EAP 6 and JBoss EAP 7 and preserves the performance, scalability, and reliability of HornetQ from JBoss EAP 6.

INCLUDED WITH JBOSS EAP

Included with a Red Hat JBoss EAP subscription

Red Hat JBoss Enterprise Application Platform

For developers	For administrators:	For your applications:
Red Hat JBoss Developer Studio	**Red Hat Customer Portal**	**Red Hat Customer Portal**
Red Hat Developers Program	Bug fixes, patches, upgrades	Red Hat JBoss Operations Network
Forums	Support, subscription management	Apache HTTP server
How-tos, demos	Documentation knowledgebase	IIS, iPlanet web server connectors
Developer code	Reference architectures	Apache Commons Jsvcs
Events		Single sign-on server

A JBoss EAP subscription gives you everything you need to develop, build, test, deploy, and maintain your enterprise Java applications. With your subscription, you also:

• Can make existing applications more efficient.

• Are free to move your applications to cloud environments on your own timeline.

• Have the flexibility to spread your deployment across hybrid environments.

More than just support for an application server, a JBoss EAP subscription gives you access to our rich Red Hat ecosystem. This comprehensive suite of tools, services, and support fosters business agility and productivity for your developers and operations staff. Eliminate complicated purchasing choices that lock you into limited approaches, strategies, and business opportunities. Open up more possibilities with JBoss EAP.

RED HAT JBOSS CORE SERVICES COLLECTION PROVIDES MIDDLEWARE OPERATIONS MANAGEMENT AND TOOLING

JBoss Core Services Collection provides entitlements to many popular capabilities that are frequently deployed with applications built by Red Hat JBoss Middleware technologies. JBoss Core Services entitlements are included at no additional charge with subscriptions for JBoss EAP (and many other JBoss Middleware products). Subscribers receive full support for JBoss Core Services Collection, including online and phone support, updates, patches, and security fixes.

JBoss Core Services Collection includes Red Hat JBoss Operations Network, which provides management, monitoring, and metrics from a centralized point for all of your JBoss Middleware products. JBoss Operations Network helps improve operational efficiency, reduces costs, and, provides a more positive experience for your users. In addition, JBoss Core Services Collection provides entitlements for Apache HTTP server, which allows JBoss EAP applications to handle incoming web requests.

JBoss Core Services Collection includes the following components:

- JBoss Operations Network

- Apache HTTP server

- Single sign-on server

- Apache Commons Jsvc

- Microsoft Internet Information Services (IIS) Connector

- Oracle iPlanet Connector

INTEGRATED DEVELOPER ENVIRONMENT WITH RED HATJBOSS DEVELOPER STUDIO

Red Hat JBoss Developer Studio is a bundled Eclipse integrated development environment (IDE) that supports your entire development life cycle and includes tools for developing, testing, and deploying rich web applications and enterprise applications. JBoss Developer Studio includes tooling capabilities and support for multiple programming models and frameworks, including Java EE 7, Enterprise Java Beans (EJB), Hibernate, RESTful Web Services, Java applications, and many more. There is no need to buy multiple subscriptions to build and test on Red Hat JBoss Middleware products or pay for production service level agreements (SLAs) to get support. It's all included.

QUICKLY DEVELOP, HOST, AND SCALE YOUR JAVA APPS IN A CLOUD ENVIRONMENT.
Ask your Red Hat sales representative about OpenShift by Red Hat offerings.

MOVE TO JBOSS EAP.
Learn more about Red Hat Consulting's offerings at redhat.com/consulting

HOW CAN I GET JBOSS EAP?
JBoss EAP is generally available from Red Hat and its partners worldwide.

VISIT DEVELOPERS.REDHAT.COM

Try Red Hat JBoss EAP on OpenShift Online by Red Hat. Discover the benefits of developing Java EE applications in a Platform-as-a-Service (PaaS) environment. Leave provisioning, management, and scaling behind and focus on the important work—writing code for your next big Java application.

Learn more: https://developers.openshift.com/en/xpaas.html

Download Red Hat JBoss Enterprise Application Platform. All of our products are open source, which means you can install them, run a demo, and develop a proof of concept. Eliminate risk by trying the software before you buy.
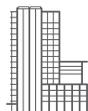
Learn more: http://developers.redhat.com/products/eap/overview/

Explore a rich library of resources. Get up to speed fast by viewing a webinar, trying out a tutorial, or watching a demo.

Learn more: http://developers.redhat.com/products/eap/learn/

Get involved. Open source software belongs to you. Blog, join a user group, contribute code, or test upcoming releases.

Learn more: http://developers.redhat.com/products/eap/community/

ABOUT RED HAT

Red Hat is the world's leading provider of open source software solutions, using a community-powered approach to provide reliable and high-performing cloud, Linux, middleware, storage, and virtualization technologies. Red Hat also offers award-winning support, training, and consulting services. As a connective hub in a global network of enterprises, partners, and open source communities, Red Hat helps create relevant, innovative technologies that liberate resources for growth and prepare customers for the future of IT.

facebook.com/redhatinc
@redhatnews
linkedin.com/company/red-hat

NORTH AMERICA
1 888 REDHAT1

EUROPE, MIDDLE EAST, AND AFRICA
00800 7334 2835
europe@redhat.com

ASIA PACIFIC
+65 6490 4200
apac@redhat.com

LATIN AMERICA
+54 11 4329 7300
info-latam@redhat.com

redhat.com
INC0405103_0516