

WHY SUBSCRIBE TO ENTERPRISE OPEN SOURCE SOFTWARE? TOP TEN REASONS TO USE JBASS ENTERPRISE MIDDLEWARE

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ABSTRACT

Many IT decision makers want to move away from proprietary middleware solutions for a number of reasons, including inflexible upgrade policies, no influence on product roadmaps, and prohibitive costs. But, they are wary of the management and maintenance burdens associated with using free open source software components.

A third alternative, subscribing to enterprise open source software such as Red Hat's JBoss Enterprise Middleware, has become increasingly compelling for organizations wanting to increase their productivity, value, and control, while benefiting from enterprise-class support SLAs, guaranteed patches, updates and hot-fixes, and legal assurance.

As open source products have matured over the past decade, even the most risk-averse IT organizations have recognized the benefits of the enterprise open source approach. And many of these organizations have switched from proprietary solutions in order to realize these flexibility, scalability, performance, reliability, availability, and customer satisfaction benefits for their organizations.

Most IT professionals are familiar with the principles of open source technology and have used some open source technologies in their application infrastructures. However, because the concept of enterprise open source solutions such as JBoss Enterprise Middleware may not be as familiar, this paper summarizes the benefits of this approach in order to help evaluators choose the right middleware solution for their organizations.

Red Hat's JBoss Enterprise Middleware integrates software components from many different open source communities, such as the JBoss Community, Apache Software Foundation, and the Eclipse Foundation, and transforms them into a finite and manageable set of robust, fully tested, integrated and supported middleware platforms that together offer a middleware reference architecture for today's enterprise.

A subscription to JBoss Enterprise Middleware offers numerous benefits including:

1. Increased leverage and control
2. Opportunity to acquire Enterprise Platforms vs. components
3. Proactive security management
4. A predictable and manageable update process
5. World-class support
6. Trusted Advice from Software Experts
7. Long-term stability in the application infrastructure
8. Open access to source code for state of the art software
9. Extensive Partner Ecosystem
10. Power to Influence the Future of Middleware



THE MIDDLEWARE DILEMMA

In today's dynamic business environment, organizations want more from their information systems—more speed, more features, better integration, better reliability, better stability and more flexible infrastructure that can adapt quickly as business requirements change. While many recent technology innovations have helped IT groups meet these requirements, these innovations have also added to the complexity of managing a modern enterprise. As a result, developers, integrators, and operations staff spend much of their time managing issues of scale and complexity.

They ensure that diverse components from multiple sources can work together, deploy large numbers of software instances across a distributed organization, facilitate data access across many systems, troubleshoot the performance of many different applications, and ensure high levels of system availability. The amount of time IT professionals spend on these and similar issues often dwarfs the time they spend analyzing business requirements, selecting or developing applications, and preparing for upcoming strategic projects.

IT decision makers, as they evaluate middleware solutions, are mindful of the challenges their teams face daily. They not only make trade-offs between capability and capital costs, but also attempt to assess the ongoing operational cost of ownership—especially the impact on the productivity of their teams. When it comes to determining which middleware solutions are right for an organization, three categories of choices are commonly evaluated by an IT enterprise:

- Purchase a traditional license for a proprietary software suite from vendors such as IBM or Oracle. Typically these solutions entail a large upfront software license fee as well as an ongoing maintenance fees (between 20 - 22% of list license fee) for software updates and support. They may be complex to use, manage and maintain. Furthermore, there may be little or no visibility to the software's inner workings and little opportunity for most customers to influence their technical directions.
- Use freely available open source components to assemble and maintain their own unique middleware platform, which offers the advantage of rapid community-based innovation, no direct costs and flexibility. However, advantages do come at a price. They require more skill, effort, diligence and risk mitigation from both developers and operations administrators while they spend valuable time supporting, maintaining and updating their own software stack.
- Enterprise open source software, such as Red Hat's JBoss Enterprise Middleware, is available via a paid subscription. It combines the innovation and transparency benefits of open source software, but mitigates the risks with the long-term enterprise-class stability, reference implementations, partner certifications, multi-year maintenance policies and SLA-based developer and production support typically found in traditional software solutions.

Given constant IT budget constraints and the rise in industry accolades for open source software, an increasing number of middleware buyers prefer subscribing to enterprise open source software. Their decision is rooted in a strong desire to leverage the flexibility, productivity and cost benefits of open source software, while balancing these benefits with enterprise-class stability, quality, and a mature enterprise software product lifecycle. Their selection results in a more manageable cost structure, a simplification of their middleware environment, greater staff productivity and higher returns on their middleware investments.



A BETTER SOFTWARE MODEL: ENTERPRISE OPEN SOURCE

The growing popularity of community led open source projects no doubt helped to power innovation and reduce the traditional barriers of obtaining and using software. The price for these benefits is that the user must take responsibility for management and ongoing maintenance.

The commercial enterprise open source model was created in response to drawbacks of existing software business models.

The keys to value of Enterprise Open Source are

- the model of how you access the software, and
- the incentives to the vendor to deliver the software and services necessary to make you successful.

Purely community driven open source projects promote collaboration, innovation and problem solving. However, such projects are not typically controlled by a single vendor, resulting in progress on features and bug fixes proceeding at a pace based on community consensus. This can result in companies being unable to trust that these open source projects are stable or supportable.

Enterprise Open Source differs in that vendors contribute significant engineering resources to a range of open source projects to ensure that they have a critical knowledge and skill base on which to then build the stability and supportability that is necessary in order for organizations to rely on the software in mission critical deployments. This capability is delivered to customers via a subscription model. Subscriptions renew on an annual basis. Because vendors risk losing business after one year unless every customer is happy with the software, they have a strong incentive to keep customer satisfaction high—for new or long-standing customers.

Customers pay an annual subscription fee for Enterprise Open Source, because the vendor offers value to the customer above and beyond that offered by free open source components. What is the nature of this value? The remainder of this paper describes ten key benefits of subscribing to JBoss Enterprise Middleware.



1. INCREASED LEVERAGE AND CONTROL

JBoss Enterprise Middleware returns increased control over your IT budget by enabling customers to redirect budget that would have been spent on expensive, complex proprietary middleware to the people and projects that will help achieve strategic business goals. In addition, the unique nature of the subscription model enables customers to upgrade on their terms, not their vendors. A subscription entitles the customer to support, patches and updates on any version of the software as soon as it's released. If you have a subscription, you get the latest version. Period. No need to buy anything else.

2. OPPORTUNITY TO ACQUIRE ENTERPRISE PLATFORMS VS. COMPONENTS

JBoss Community projects consist of many independent projects, each with its own release schedule, versions, and software dependencies—differences that can create headaches for IT professionals who want to use several components together. In addition, and in keeping with good open source practice, any community contributor may commit features and updates to the project code, some of which may never be intended for enterprise deployments. For some developers this is not a problem; in exchange for having access to the latest features, they are willing to contend with the complexity of acquiring, integrating, sanitizing, testing, and then upgrading many different open source components. For developers who are exploring advanced solutions and are not under pressure to put a stable application into production yesterday, this is a reasonable approach. But most enterprise IT professionals prefer to take advantage of platforms in which someone else has already done the bulk of that integration work.

That is why the JBoss Enterprise Middleware team creates platforms from components, mediating between the rapid development of the community projects and the enterprise requirements for specific platform functionality and stability. This mediation takes place through a two-part process of productization. First the team selects multiple community projects for use together as a platform. Then the team puts these raw components through a rigorous process in which they go through product-grade testing of the components separately and together in order to create sanitized, stable, resilient, and high-functioning platforms that meet enterprise requirements. Specifically, JBoss Enterprise Middleware is put through a level of testing not done in the community, including in-depth testing for performance and scalability, availability, reliability, and compatibility with various operating system, JVM and database combinations. Because JBoss Enterprise Middleware developers have already tested the components together, IT professionals can implement a middleware infrastructure for their applications with much less work than if they had begun with the community components individually.

In contrast, IT professionals using community projects without this mediation face greater risk that an untested software component will fail or that multiple components will not work well together without substantial additional development and integration work. In these organizations, developers and operations professionals can lose a lot of time troubleshooting problems, and the business may also experience interruption due to system downtime or other failures. By delivering platforms that meet enterprise standards, JBoss Enterprise Middleware helps IT groups avoid these risks and reduce these opportunity costs.

Red Hat engineers dominate the majority of the community projects consumed within a JBoss Enterprise Middleware platform. This gives us unrivalled control of the roadmaps for those projects as well as the understanding behind the code. Since it is the same engineers who help productize these projects as well as support and maintain them, the platforms are a unique combination that cannot be easily replicated elsewhere.

3. PROACTIVE SECURITY MANAGEMENT

Every IT organization takes security seriously because problems, including compromised customer data and corrupted applications, can pose serious risks to the business. But as systems become more complex, a bewildering array of vendors' hardware and software component disclosures can make it time consuming and difficult to attend to security issues.

The JBoss Enterprise Middleware Security Response Team, composed of worldwide security experts, proactively monitors security issues that might affect customers' application stacks. This entails monitoring third-party software reports, working with partners, and conducting our own tests. Because Security Response Team members know which versions of JBoss Enterprise Middleware you are using, they can quickly determine how a given security issue affects you, and create a patch to address the issue if necessary. Because Red Hat continually monitors security issues, you can reduce risk while minimizing work for your team.

In contrast, IT professionals using community projects are on their own when it comes to managing the potential security issues related to their open source components. This obligation increases the time they need to spend monitoring threats, as well as the risk to their organizations if potential vulnerabilities go unaddressed. Furthermore, such IT professionals would need to have a good understanding of the code behind the projects in order to apply any security patches and ensure that they are sufficiently tested.

Another important distinction is to difference between how security patches are issued in the community vs. JBoss Enterprise Middleware. Community projects typically do not patch security issues in current release. They create a new release that usually contains not only patches, but also new features. In some cases, new features may not be backward compatible. So, in order to get the security fix, they have to upgrade the component, which then puts them back into the integration, testing, and certification cycles yet again. To the contrary, JBoss Enterprise Middleware delivers security patches on a feature stable release that does not require upgrading to a new release with new features.

4. A PREDICTABLE AND MANAGEABLE UPDATE PROCESS

While open source community projects are constantly being developed and enhanced, enterprise IT organizations do not upgrade their application stacks whenever a middleware update is available. They prefer to plan and schedule software updates so as to minimize disruption and maximize staff and business productivity. Enterprise management requirements have driven evolution of accepted software update best practices that include:

- fixing problems according to ranked priorities
- providing minor updates on a regular schedule
- communicating clearly about which problems have been addressed and about known problems that have not yet been addressed
- patching critical defects as quickly as possible
- thoroughly regression testing any updates to the software
- guarantees on backwardly compatible updates within minor version releases

These practices are not unique to proprietary software vendors; the JBoss Enterprise Middleware team creates software updates in the same way. As a result, JBoss Enterprise Middleware customers benefit from a predictable and manageable flow of updates. This process enables IT organizations to plan their patches while remaining insulated from rapid, potentially destabilizing changes in the related community projects. Not only can enterprises take full advantage of fixes as they are created, but they will also have the option to benefit from the ongoing functional evolution of open source components—when and if they choose to take advantage of them.

In addition, JBoss Enterprise Middleware offers a completely transparent bug fix and enhancement process. Customers can freely look at all issues, even before they are fixed. This stands in stark contrast to proprietary vendors which would typically not make bug data available to customers. Because the JBoss Enterprise Middleware process is transparent, customers can make an informed decision to either upgrade to a bug fix release, or to a completely new major version. Customers can also match known issues to their cases, and create a well structured test plan to more efficiently move through their upgrade process to help reduce overall costs.

With open source community software components, IT organizations must rely on community forums for information about defects (assuming they are reported at all) and they must wait until a later release for fixes and enhancements. If not, they risk creating a legacy of non-standard software by fixing the open source components themselves. JBoss Enterprise Middleware customers can instead take advantage of updates that have been created and tested by an enterprise team, so that they can update their software without assuming additional business risk.

5. WORLD-CLASS SUPPORT

In addition to providing robust, reliable enterprise technology platforms, Red Hat also delivers world-class support to ensure that its customers get the most benefit from those platforms. Renewal rates are a key performance indicator for Red Hat. But evaluators should not take a vendor's word for it when comparing the quality of support for middleware solutions. Before selecting a solution, talk with customers who have used the software, interacted with support technicians, and had their issues addressed.

Several factors drive the high quality of JBoss Enterprise Middleware support, including:

- **The subscription model encourages superior customer care.** The entire business model for JBoss Enterprise Middleware is based on customer satisfaction. Because customers renew their subscriptions each year, they have ample opportunity to evaluate the benefits they receive from the relationship. The JBoss Enterprise Middleware team's most important priority is to ensure customer success with their solutions. In contrast, proprietary software vendors must continually choose between development of capabilities that will attract new customers and development in support of current customers who have already paid their license fees.
- **Access to highly-trained support professionals maximizes your team's productivity.** Red Hat has created a highly-training support team with a relatively flat hierarchy. Typical support technicians have 8-10 years of technical experience and can understand and patch code. In addition, technical specialists who have contributed to development of the various middleware components, on the enterprise team and in the community, are on call to answer questions in depth. This means that developers who request support do not have to waste time talking to gatekeepers who cannot address their technical problems, resulting in higher productivity for your team.
- **Open source streamlines problem solving.** Open access to source code streamlines problem resolution. With access to source code, a developer and JBoss Enterprise Middleware support specialist can pinpoint and resolve a problem quickly, in contrast to the multi-stage process necessary with proprietary software. Furthermore, since all of our code is open source, we leverage our communities by constantly monitoring and interacting with them to have our projects used and tested widely. Open source allows for more immediate feedback on new features and bug fixes in the field than the alternative.
- **Unlimited support optimizes problem solving.** With JBoss Enterprise Middleware, there is no limit to the number of support incidents. Red Hat's philosophy is that if you receive the help you need when you need it, you will be able to get more value from the software and from the relationship.

6. TRUSTED ADVICE FROM SOFTWARE EXPERTS

Developers and architects rely on the JBoss Enterprise Middleware team to be experts in software best practices, and to stay on the leading edge of advances in middleware, application development, and management. Red Hat transforms that expertise into value for its customers in two ways.

First, JBoss Enterprise Middleware provides an open reference architecture that represents the cumulative wisdom of thousands of developers around the world.

Second, the JBoss team works closely with customers to understand their challenges and advise them on a wide range of topics, saving them time and money. JBoss Enterprise Middleware support technicians are versatile and experienced technical professionals who can not only answer questions about the software, report defects, and solve technical problems, but can also advise customers about application architecture, design decisions, technology to evaluate, best practices for configuring the data center, and new developments in business applications. These professionals are also an integral part of the community projects, feeding platform requirements to the community as well as Red Hat engineers, to ensure that the roadmap is influenced by customer requirements.

7. LONG-TERM STABILITY IN THE APPLICATION INFRASTRUCTURE

Because most business applications are in service for at least three years, there is nothing more frustrating than being forced to upgrade to a new middleware version simply because the currently-deployed version will no longer be supported by the vendor. While most proprietary vendors will offer long-term stability, community projects do not. To ensure long-term stability of Red Hat's customers' application infrastructures, Red Hat guarantees that each new release of JBoss Enterprise Middleware will be fully supported for at least five years. This means, for example, that Red Hat will patch defects and security holes for at least five years from the release date.



8. OPEN ACCESS TO SOURCE CODE FOR STATE OF THE ART SOFTWARE

The open source approach to software development is based on the idea that people can accomplish more when they work together. Unlike proprietary solutions, where source code is viewed as proprietary information available only to its owner, open source software benefits from everyone's access to the source code in its design and its implementation. Both JBoss Community projects and JBoss Enterprise Middleware solutions benefit from an open development process that brings many intelligent minds together to decide how a given middleware component can best be improved. The result is rapid, iterative development that takes advantage of many different perspectives to advance the state of the art. The code is tested in many different environments, represented by the many different community contributors to the projects. As such, open source offers vendors and users access to immediate feedback on the applicability of code (features, APIs etc.) in a wider arena than closed source, making it more timely for user needs and responsive to change in those needs.

Whether you use free JBoss Community projects or subscribe to JBoss Enterprise Middleware, your IT professionals will always have access to the source code. This visibility provides you with greater control over your middleware than what would be possible with proprietary solutions.

9. EXTENSIVE PARTNER ECOSYSTEM

As enterprises increase their use of Java EE technologies, they are reassured to see the breadth and depth of the JBoss Enterprise Middleware partner ecosystem. This worldwide network of partners includes: regional system integrators and consulting firms who have become Red Hat Advanced Business Partners, global system integrators, technology ISVs who market their own industry-leading products in related technology areas, and hundreds of application ISVs who have built their own products to run on or embed a JBoss Enterprise Middleware platform. This extensive network of software, consulting, integration, training, and hosting partners all support JBoss Enterprise Middleware platforms, and they do not play an active role in community-based projects.



10. POWER TO INFLUENCE THE FUTURE OF MIDDLEWARE

Influencing product direction with a proprietary mega vendor can be nearly impossible, as your voice has to rise above the thousands and penetrate a closed development model. Community projects offer a vehicle for participants to post recommendations, but even if recommendations are accepted, the projects still remain unsupported with no guarantee of patches or updates over the long term. When you subscribe to JBoss Enterprise Middleware, you become part of a select group and your needs receive careful attention: your voice in the communities is amplified because of the control JBoss has within its own projects and beyond.

In your relationship with Red Hat, trusted advice flows in both directions. Red Hat will not succeed without carefully listening to its customers. Red Hat must work to understand not only your application infrastructure requirements, but also your future needs in order to fully support your business. Through its rotating customer advisory board, ongoing customer dialogues, and highly-receptive support organization, Red Hat consistently listens to all customers. And Red Hat makes sure, through its influence with the JBoss Community and JBoss Enterprise Middleware, that software roadmaps are created with customer needs foremost in mind.

CONCLUSION

The enterprise open source model, exemplified by JBoss Enterprise Middleware, offers significant benefits for organizations that seek the advantages of open source software while also requiring the stability, manageability, and support traditionally found with proprietary software. By subscribing to JBoss Enterprise Middleware, organizations get the best of both worlds without the extra management headaches and business risks that come with using free open source components.

To learn more about how a JBoss Enterprise Middleware subscription can help your organization, visit jboss.com or talk with your Red Hat representative.



ABOUT RED HAT

Red Hat was founded in 1993 and is headquartered in Raleigh, NC. Today, with more than 60 offices around the world, Red Hat is the largest publicly traded technology company fully committed to open source. That commitment has paid off over time, for us and our customers, proving the value of open source software and establishing a viable business model built around the open source way. Red Hat provides high-quality, affordable technology to the enterprise. Our solutions are delivered via subscription and range from operating systems and platforms like Red Hat Enterprise Linux and JBoss Enterprise Middleware, to application and management tools, as well as consulting, training, and support.

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