

CONNECTING JBOSS® ENTERPRISE MIDDLEWARE TO THE SAP LANDSCAPE

SAP AND RED HAT — PERFECT PARTNERS

With a collaborative business relationship of more than 10 years, Red Hat® and SAP are focused on bringing to market world-class open source and enterprise business solutions. The companies work closely together to optimize performance and streamline the deployment of SAP Business Suite applications running on Red Hat software.

Recognizing the need to advance strategic technologies, Red Hat and SAP share a significant presence in open source initiatives. Red Hat has built its business on the premise that open source promotes rapid innovation, interoperability, and standards compliance. Red Hat is also actively engaged in the SAP development community, optimizing its software solutions for adoption in the SAP landscape and striving to enhance SAP integration and development tools.

RED HAT SOLUTIONS FOR SAP

Red Hat's open source operating system, virtualization, and Java middleware platforms give companies a solid platform on which to run the SAP infrastructure and develop strategic business applications. Today Red Hat Enterprise Linux is the leading Linux platform for SAP deployments worldwide. With more than 61% of annual server shipments in the past four years, it's also the world's leading open source Linux choice. And Red Hat Enterprise Linux gives organizations flexibility in deploying the SAP stack — whether it's on bare metal, virtualized, or in the cloud.

Certified for SAP Business Applications and SAP NetWeaver, Red Hat Enterprise Virtualization is a fully open source virtualization platform. Along with benefits such as increased utilization, application mobility, and improved availability, it provides world-class virtualization capabilities with an almost unlimited number of guests and near-native scalability.

JBoss Enterprise Middleware gives your business a choice of scalable and high-performance application development frameworks, providing the platforms you need to build effective enterprise Java applications and services. JBoss features a comprehensive suite of development tooling to construct custom Java applications, including those that extract data from SAP NetWeaver.

Across the entire Red Hat solution stack, your business receives consistent benefits — performance, flexibility, stability, and great value — because the foundation of all Red Hat technologies is open source.

THE COLLABORATION CONTINUES

The long-standing collaboration between Red Hat and SAP is thriving. Engineers from both companies are working together with a focus on developing new tools to further the integration of SAP Business Suite with enterprise Java applications running on JBoss Enterprise Middleware. The aim of such integration, of course, is a more intelligent, integrated enterprise — one that can maximize the value of your data assets and accelerate business decisions.

Towards this end, Red Hat and SAP are collaborating to solve a common dilemma faced by many enterprise Java architects, particularly those versed in JBoss middleware. When faced with developing new Java business applications, these designers are often tasked to find a way to tap into existing SAP data and business processes. For this reason, Red Hat is engaged in a strategic effort to enhance JBoss and SAP interoperability. The intent is to provide capabilities that make it easier to consume SAP application data and business processes from the JBoss Enterprise SOA Platform, JBoss Enterprise Data Services Platform, or JBoss Enterprise Application Platform. This effort makes Red Hat the only open source solution with an open architecture that abstracts SAP information in this way.

Solving interoperability problems is a complex task, and generally no single solution meets the need of every development project. For this reason, Red Hat plans multiple interoperability options to address different JBoss and SAP integration requirements — lightweight and data-centric Java applications that need to consume SAP data, SOAP Web services integration to support SOA solutions, and deep application integration that requires an API-based approach.

The initial phase addresses an emerging set of applications that target SAP data consumption via SAP Netweaver Gateway. Relying on open standards such as REST, OData, and ATOM, SAP Netweaver Gateway integrates with SAP

back-end systems through certified connectors, enabling mobile and social media consumers to easily tap into the value of SAP data. Red Hat is working with SAP to provide functionality that allows Java developers to use the tools they already know — JBoss Developer's Studio and the Eclipse IDE — to discover what SAP services exist. Red Hat is developing tools to generate Java proxies and the metadata needed to construct and deploy integrated applications quickly. At runtime, a JBoss application can simply invoke SAP Netweaver Gateway services to access the required content, as depicted below.

JBoss applications can make similar connections to expose SAP Enterprise Services via SOAP connections. In this way, Java architects can connect JBoss-based Web services to the SAP infrastructure, integrating SAP data and business processes with other parts of the enterprise. Through new tooling, developers will be able to make connections, browse SAP interfaces, build the appropriate application stubs, and create new applications and Web services.

SAP and Red Hat are also considering the challenges posed by application-to-application interoperability and how best to simplify EAI-style integration. SAP supplies the JCo RFC library that supports Java-to-ABAP communication, providing a technology foundation that enables Java EE applications and JBoss platforms to connect to SAP services.

BENEFITS

Breaking down the walls between information silos and different parts of your business offers clear advantages for effective decision-making. Red Hat and SAP's approach to enhancing interoperability yields these additional benefits:

- **No SAP training required.** In many cases, Java developers don't need to be well-versed in ABAP to bridge into the SAP landscape. Since developers can use familiar Eclipse tools, they can quickly create new JBoss applications to integrate SAP data with other parts of your business.
- **Access to SAP systems in real time.** Applications can consume data from active SAP systems so there's no need to generate data copies that can quickly become out of sync.
- **Leverage existing security.** Since applications use vendor-supported interfaces to access the SAP back-end, they automatically take advantage of configured security and access controls.

Red Hat's vision is to deliver interoperability tools that you need to make the most of your entire IT landscape, taking the complexity out of SAP data and business process reuse.

FOR MORE INFORMATION

Contact us about your specific SAP and JBoss integration requirements. To learn more, send inquiries to sap@redhat.com.

