

**Benefits of a True Enterprise-class Platform**

- Reliability, Availability, Security
- Robust services and support
- Stability

**Components**

- Ingres Database
- Boss Developer Studio
- JBoss Enterprise Application Platform

## Ingres Development Stack for JBoss

Once thought to be lacking the enterprise functionality to replace proprietary databases in production environments, open source databases have arrived. Ingres Database provides the security, reliability, availability, and performance needed in the most demanding environments. JBoss Enterprise Application Platform balances innovation with enterprise-class stability providing caching, clustering, high availability, and security services along with the most popular clustered Java EE application server and next generation application frameworks. JBoss Developer Studio provides a robust, Eclipse-based open source development environment for team or individual development. In addition, Red Hat Enterprise Linux provides the secure, reliable, cost-effective operating system that thousands of medium and large enterprises depend on for their business-critical IT solutions.

Today, Ingres, JBoss, and Red Hat technology combine forces to deliver the first enterprise-class Ingres Development Stack for JBoss that addresses both the economic and technological needs of today’s business-critical applications. The Ingres Development Stack for JBoss is a fully integrated open source stack; simplified, delivered, and supported by Ingres.

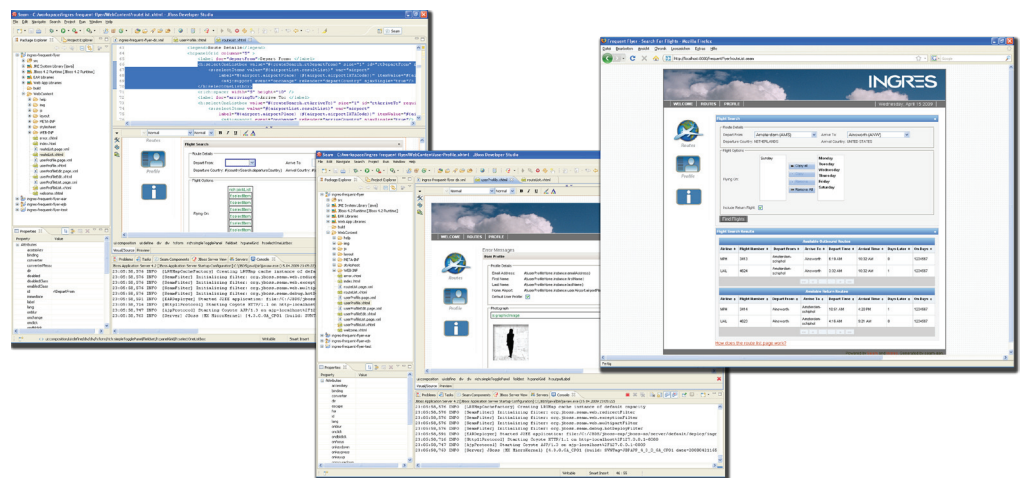
**Ingres, JBoss, and Red Hat Save Money without Sacrificing Functionality**

In the current economic climate, IT budgets are shrinking at an alarming rate. IT managers must reduce spending on technology investments or on operations. Reducing spending on technological investment means falling behind the competition. Reducing spending on operations means failing to meet service level agreements. How can you avoid both these traps? Investing in new solutions, based on open source, is the answer; creating innovation to boost revenue and eliminate the risk.

Open source software (OSS) solutions have long been viewed as a viable way to reduce operational costs. However, until now, many organizations have resigned the use of OSS solutions to non-strategic application areas. This has been fueled by the perception of OSS as lacking in the features, functions and reliability of enterprise-class, proprietary solutions. With Ingres Database and JBoss Enterprise Application Platform that is no longer the case.

### What is the Ingres Development Stack for JBoss ?

The Ingres Development Stack for JBoss is a complete application infrastructure solution that dramatically reduces the cost of deploying enterprise web and service oriented architecture (SOA) based applications. It includes everything you need to run and develop standard web and enterprise applications based on Java standards on either Linux or Windows OS. The Ingres Development Stack for JBoss is a low-cost enterprise solution that is delivered in an easy-to-install, fully integrated bundle including a 90-day free trial supported Ingres. The platform allows users to deploy new web applications on an enterprise-class open source infrastructure, reducing lifecycle and application management costs and making the most of open source technologies. The platform reduces the management overhead required to keep application infrastructure in sync across an organization, allowing companies to refocus IT resources on more business-critical activities. With no client-access licenses, upgrade charges, or separate maintenance fees, the reasons to move to a standard open source application platform are more compelling than ever.



### Components

Ingres Database is the only open source database management system that provides the reliability, availability, scalability, and security required for business-critical applications. Ingres can reduce IT costs and time-to-value while providing the strength and features expected from an enterprise-class database. Ingres provides security features required for Sarbanes Oxley / HIPPA Compliancy, including roles and role separation; scalability features such as flexible, partitioning with data pruning; and availability features such as online backup, replication, and failover.

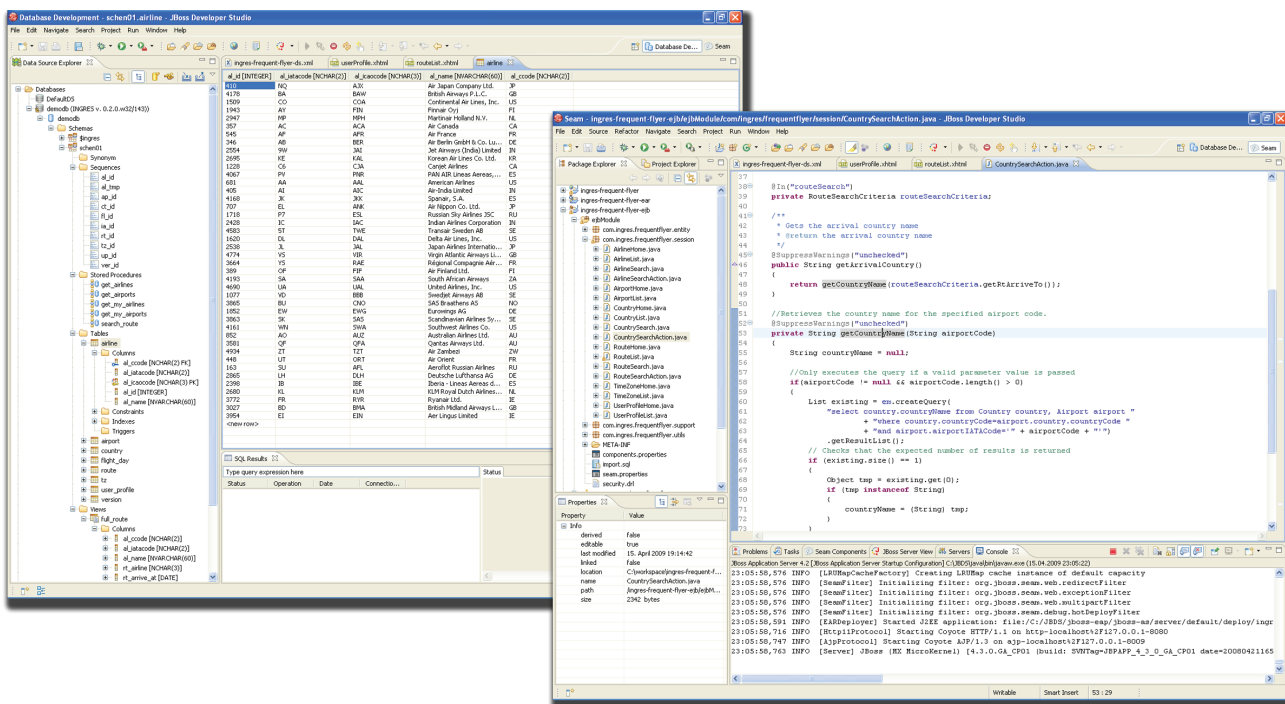
JBoss Enterprise Application Platform is an integrated Java Enterprise Edition (EE) application and services hosting platform that extends the Java standard and forms the foundation of Java EE 5. JBoss Enterprise Application Platform is integrated and performance tuned from the start for business-critical production environments. By integrating Java EE and Web 2.0 technologies like Hibernate and Seam into the JBoss Application Server, JBoss Enterprise Application Platform is a complete solution for next generation enterprise Java applications.

JBoss Application Server is the most widely used Java application server on the market. JBoss AS is a certified Java platform for developing and deploying enterprise applications supporting both traditional APIs and Java EE APIs and includes improved performance and scalability through buddy replication and fine grained replication. JBoss Application Server provides a complete Java platform by integrating Apache Tomcat as its web container along with capabilities for data caching, clustering, messaging, transactions, and an integrated web services stack that simplifies development of web services. In addition to providing the full range of J2EE 1.4 services, JBoss Application Server includes extended support for Java EE 5 features such as: EJB3.0, Java Persistence API 1.0, Servlet 2.5, JSP 2.1, JSP/EL 1.0, JSTL 1.2, JSF 1.2, Javamail 1.4, JAF 1.1, SAAJ 1.3, JTA 1.1.

Hibernate is the leading technology for object/relational mapping and persistence (ORM). It provides the ability to map an object model's data representation to a relational data

model and corresponding database schema to address ORM's complexities. Hibernate provides mapping from Java classes to database tables and from Java data types to SQL data types, as well as data query and retrieval facilities that significantly reduce development time. It also relieves enterprise application developers from common data persistence programming tasks by eliminating the need for manual, hand-crafted data processing using SQL and JDBC.

Seam is a powerful application framework that simplifies building next generation Web 2.0 applications. Seam supports a streamlined programming model for EJB3, JSF (Java Server Faces), jBPM and helps overcome common issues and complaints from developers about traditional JEE. Seam helps unify and integrate technologies such as Asynchronous JavaScript and XML (AJAX), Java Server Faces (JSF), Enterprise Java Beans (EJB3), Java Portlets and Business Process Management (BPM).



### Contact Ingres Now

Now is the time to invest in new IT solutions, create innovation, boost revenue, and stay ahead of the competition. Ingres and Red Hat JBoss deliver the enterprise-class Ingres Development Stack for JBoss that lets you do just that.

### Minimum System Requirements

- JDK 1.4 or higher (1.4.2 is recommended)
- 2GB RAM
- 700 MB hard disk space
- 400 MHz CPU
- Linux or Windows Operating Systems

For more information on included components and compatible configurations, visit:

<http://www.ingres.com/jboss>

## About Ingres Corporation

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Ingres is the leading open source database management company. We are the world's second largest open source company and the pioneer of The New Economics of IT, providing open source solutions at dramatically reduced cost than proprietary software vendors. As a leader in The New Economics of IT, Ingres delivers low cost and accelerated innovation to its more than 10,000 customers worldwide.

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