

For the IT professional



**WebSphere** software



**The freedom of Linux. The scalability of WebSphere software from IBM.**



**Free yourself from technology restrictions**



*“Selectica has successfully deployed its Interactive Selling Systems (ISS) on Linux and we are excited to work with IBM to broaden our support to include WebSphere Commerce, WebSphere MQ and other IBM technologies. Now, enterprise customers can successfully deploy their mission-critical e-business solutions for Interactive Sales Configuration, Pricing Management, Accurate Quoting and Guided Selling on the Linux operating system, due to its total cost of ownership benefits.”*

*–Sanjay Mittal, Ph.D, CTO/EVP of Engineering and Co-Founder, Selectica*

## **Develop the e-business you always wanted**

Freedom to innovate is about making choices, changing strategies to meet evolving business needs, taking charge. It's what you need to succeed in the dynamic world of e-business. And it's what you get when you develop with WebSphere® software from IBM on Linux®.

It wasn't long ago that Linux was a grassroots movement in open-source circles. But a word-of-mouth following—backed by flexibility, affordability, rock-solid reliability and, for ultimate control, programmability—has taken Linux to the big time in a big way.

Today, the Linux operating system (OS) continues to increase its market penetration. International Data Corporation (IDC) forecasts that shipments of new server licenses of Linux will grow at double digit rates through 2006, placing it among the few operating systems that will define the market of the future.<sup>1</sup>

Of course, the OS is just part of the equation in a successful IT environment. You also need dynamic software that lets you build the e-business of your dreams.

That's where IBM Software comes in. Both IBM and the Linux community are driven by a common vision to provide value, both in the cost and quality of their products. You'll find this value in WebSphere software for Linux.

Flexible, reliable and cost-effective, WebSphere products on Linux are the keystones of many of the world's successful e-businesses. Companies such as Korean Air and weather.com are powering their e-businesses with WebSphere software on Linux. Shouldn't you?

## **Turn to software solutions you can trust**

IBM recognized the value of Linux early on—before the rest of the commercial world did—and continues to help advance Linux through the strength of its commitment. Now that Linux has established itself as the fastest-growing server OS in the world, its adoption has evolved from infrastructure uses to enterprisewide business applications.

Of all the business applications powered by Linux, e-business solutions are clearly the next frontier. To this end, IBM has already delivered all of its key middleware on the Linux platform. In addition to WebSphere infrastructure software for dynamic e-business, IBM offers DB2® data management software, Lotus® collaboration, e-learning and knowledge-enabling software and Tivoli® technology management software for the Linux platform.

Today, IBM leads the way in e-business software shipped for Linux. The reason is simple: Software from IBM running on Linux offers the features that businesses value most:

- *Flexibility—With IBM's commitment to open standards, you can easily scale Linux applications from entry-level, Intel-based servers to mainframes without having to change them. Using development tools from IBM and IBM Business Partners, you can efficiently integrate these applications with existing systems to meet changing customer demands. Business needs, not technology restrictions, guide your technology decisions.*

## Act quickly to meet changing business needs

- *Reliability—IBM software and Linux are both proven to be highly stable in a variety of real-world implementations, helping you increase productivity as well as your responsiveness to customers. Linux servers have been known to run for years without being rebooted. Plus, they can scale as your business grows and are highly available under intense demand.*
- *Cost effectiveness—Running IBM software on Linux, you can contain and even reduce your IT expenses without hindering performance by taking advantage of lower OS software costs, less costly systems maintenance and more flexible hardware choices.*

In addition, by offering a common, open OS source code, Linux has been a key part of the movement toward interoperability and portability that has become standard for e-business application development. IBM continues the movement with open standards-based solutions like WebSphere software.

### See why it all begins with WebSphere software

In its early days, Linux was commonly used for Web servers, particularly Apache HTTP Server. Then e-business began maturing, and businesses demanded more from their Linux Web servers: dynamic information, high-volume transaction processing and backend integration.

WebSphere software means dynamic e-business. Today, there are nearly two dozen products supporting Linux from the WebSphere software portfolio. The key products in this family include:

- *IBM WebSphere Application Server*
- *IBM WebSphere Commerce*
- *IBM WebSphere MQ*
- *IBM WebSphere Studio Application Development.*

The WebSphere software platform includes Java™ technology-based application servers for Linux, running on servers ranging from inexpensive Intel-based machines, such as IBM @server xSeries™, all the way up to the IBM @server zSeries™. These application servers provide a solid foundation for your

e-business, enabling you to extend anytime e-commerce to customers, electronic business-to-business (B2B) transactions to partners and suppliers, and integrated business processes to your employees. And you have confidence knowing that 65 percent of Fortune 500 companies count on WebSphere software.

With WebSphere software running on Linux and Apache, you have the flexibility of open-standards solutions based on Java 2 Platform, Enterprise Edition (J2EE)-compliant technology. In addition, the software supports Web services protocols—including, XML, SOAP, UDDI and WSDL—as well as integration between enterprises. You also have reliability, because WebSphere software provides a stable transactional environment for running Java servlets and Enterprise JavaBeans (EJB) on top of Apache Web servers. And, you have a cost-effective solution since the software enable you to cut application development costs through code reuse.



*“Running WebSphere software on Linux offers superior reliability, cost savings and the advantage of a large and growing body of Linux administrators for support. IBM’s co-marketing presence in our alliance venture points to the tremendous credibility IBM has in the Linux world.”*

*– José Peyon, Business Development Director, Diveo Brazil*



## **Connect with customers, partners and suppliers**

### **Understand how WebSphere Application Server is the foundation for e-business**

IBM WebSphere Application Server, based on Apache HTTP Server, is an e-business deployment environment that provides all the software and tools needed to build, deploy, integrate and manage e-business applications.

Using WebSphere Application Server, you can transform static Web sites to dynamic sales, service and collaboration channels in a flash.

Taking advantage of its support for J2EE technology, you can develop robust business logic using reusable Java objects and industry-standard XML formats. Integrating it with other WebSphere software, you can deliver aggregated and personalized information to build more loyal customer relationships, develop stronger partnerships and fuel a more productive workforce.

Scalable and secure, the latest version of WebSphere Application Server, Advanced Edition, includes:

- *Support for Web services protocols*
- *Superior connectivity through a preview implementation of J2EE Connector Architecture, which enables integration with IBM CICS®, IBM IMS™ and IBM WebSphere Host On-Demand applications*
- *Enhanced integration with IBM Tivoli Policy Director and pluggable user registries for better security.*

### **Transact business across borders with WebSphere Commerce**

When e-business means online stores, your customers, partners and suppliers expect to conduct sales transactions with you at all hours of the day. WebSphere Commerce is an integrated, Java technology-based solution for efficiently developing scalable, reliable and personalized e-commerce applications of all sizes and scopes.

Designed for an open environment, WebSphere Commerce supports the entire commerce chain, including order entry, fulfillment, payment and settlement. It also features runtime services, security, a rules engine, as well as catalog, order and negotiation subsystems. With an e-commerce site developed with WebSphere Commerce, you can:

- *Develop targeted promotions based on business rules and deploy them on the fly*
- *Understand which sales tactics work and which don't using IBM WebSphere Commerce Analyzer, which is included*
- *Support multiple languages, currencies, payment structures and shipping options*
- *Extend your application to wireless users with built-in m-commerce support.*

WebSphere Commerce runs on top of WebSphere Application Server. It includes IBM DB2 Universal Database™, the data management solution behind many of the world's leading e-businesses. It is also IBM Tivoli Ready, enabling you to use IBM Tivoli solutions to manage your e-commerce systems.

### **Integrate effectively with the WebSphere MQ family**

Once the Web store functionality is in place, the real challenge begins: integrating with legacy applications to create a seamless path for online transactions to merge with your company's business processes. Business integration software from the IBM WebSphere MQ family can help.

The WebSphere MQ family (formerly known as IBM MQSeries®) consists of:

- *IBM WebSphere MQ, middleware providing the base messaging functions between e-business applications and legacy business systems*
- *IBM WebSphere MQ Everyplace, which enables mobile workers on remote devices to access enterprise data*
- *IBM WebSphere Adapters, which connect packaged applications such as SAP to your e-business applications.*

Using solutions from the WebSphere MQ family, you can rapidly integrate your Linux applications for fast deployment of e-business solutions. With WebSphere MQ, for example, you get asynchronous, assured delivery of data for application-to-application communication across hardware and software platforms. With WebSphere MQ Everyplace, you can extend your e-business solutions to the growing mobile environment, adding value through essential functions including: high security, optimized datastreams for fragile communication networks and connectivity for a wide range of mobile devices.

### **Get up and running quickly with WebSphere Studio**

With the WebSphere Studio development environment, you can develop Linux-based Web applications and services on Linux, taking advantage of the platform's reliability, high performance and flexibility. Until recently, visual development and other collaborative tools were not readily available on Linux. In late 2001, IBM donated its Eclipse application development workbench software to the open-source community.

Eclipse, which works on Linux as well as Microsoft Windows®, can accelerate application development and improve program productivity by providing a single, open environment for integrating tools from many providers. You can use the many tools available as Eclipse plug-ins to develop Linux Web applications and services on either Linux or Windows versions of Eclipse. Tools developers, including IBM, can run their application development tools on top of Eclipse on Windows or Linux and therefore enable development on any platform to which the Eclipse Project ports the workbench. Eclipse has broad industry support—more than 150 leading software tools suppliers are working together to evolve Eclipse software. Two configurations of WebSphere Studio are currently available on Linux:

- *IBM WebSphere Studio Homepage Builder, for individual Web site developers, allows easy creation of dynamic and attractive Web pages*
- *IBM WebSphere Studio Application Developer, for application and Web developers, offers an integrated development environment for Java technology-based applications (including tools for J2EE and J2ME) and Web development (including HTML, XML, JSPs and Web services).*

### **Go with the leader in e-business innovation**

Every year, many companies like yours select Linux for their business-critical applications. And every year, their choice is more justified as new Linux-ready applications become available. Throughout 2001, IBM's Independent Software Vendor (ISV) partners boosted the number of Linux-based applications to more than 3,000—a 75 percent increase. Also in 2001, IBM experienced an 800 percent increase in the number of software Business Partners who declared that their solutions and/or services are available on Linux.<sup>2</sup> In addition to its Business Partners, IBM has a cadre of specialists providing services and support to assist with your development efforts.

Whether you're a small business ready to grow, an expansive global enterprise or somewhere in between, developing your e-business applications with Linux and WebSphere software from IBM can give you the freedom to innovate at the pace you need.

### **For more information**

Contact your IBM marketing representative or IBM authorized software reseller, or visit our Web site at [ibm.com/software/linux/software/products/ws.html](http://ibm.com/software/linux/software/products/ws.html)



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