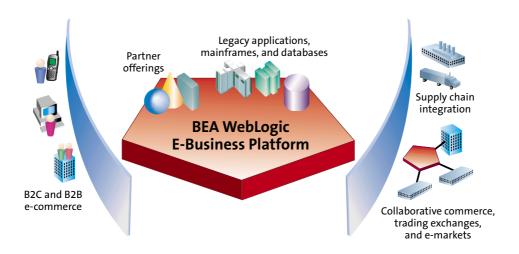
# Future-Proof Your E-Business with the BEA WebLogic E-Business Platform™



A BEA White Paper



How business becomes e-business™

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# **Future-Proofing Your E-Business**

Change today happens suddenly, unexpectedly, unpredictably. It occurs in companies the way that we see it occur in biological systems or in technological breakthroughs: Change is sudden, nonlinear, and constant. Its amplitude and direction can't be forecast. Killer apps can come from anywhere; new competitors are lurking everywhere.

Markets emerge, flourish, inspire imitators, breed competitors, and disappear seemingly overnight... Organizations that want to prosper over the long term need to practice the art of continuous change.

— Former Secretary of Labor Robert Reich, "Your Job Is Change," Fast Company, Oct. 2000

To succeed in the Internet economy, your e-business must expect change, accept change, and embrace change, but you must also use change to your advantage. Businesses that can't are on the fast track to irrelevance. Businesses that can are future-proofed, prepped, and primed to capitalize on the opportunities presented by change. Future-proofed businesses, in short, use agility as a competitive advantage.

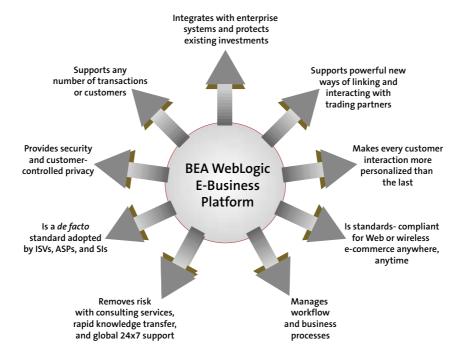
Your plans and your technology must be as fluid as the changing environment in which they operate. Your software, your systems, your entire technology architecture must naturally mold and adapt to changes without costly, time-consuming infrastructure overhauls. Your e-business software platform must provide a safe, yet powerful catalyst for ongoing innovation, increasing customer value-add, and continuing competitive advantage.

The BEA WebLogic E-Business Platform™ is a comprehensive infrastructure for developing and deploying reliable, scalable e-business applications. BEA infrastructure future-proofs e-business by enabling businesses to get in the game fast, supporting boundless growth, providing built-in agility, and protecting existing investments in enterprise systems. With the BEA WebLogic platform, businesses can turn customer transactions into enduring, profitable relationships, support powerful new ways of linking and interacting with suppliers and partners, and immediately leverage new technologies for competitive advantage.

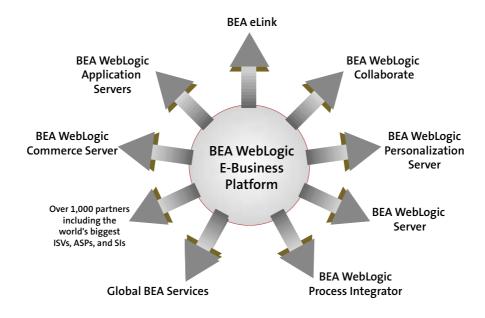
More than 8,000 companies have built their e-businesses on BEA. And the BEA WebLogic E-Business Platform is the *de facto* standard used by over 1,000 systems integrators, independent software vendors (ISVs) and application service providers (ASPs) to provide complete solutions that fast-track and future-proof e-businesses for high growth and profitability.

# The Minimum E-Business Platform Imperatives

To become a truly future-proof business, you need to build on a flexible technology infrastructure that satisfies the following criteria:



While many software products are marketed as "e-business platforms," one alone meets the imperatives for future-proofing your e-business: The BEA WebLogic E-Business Platform.

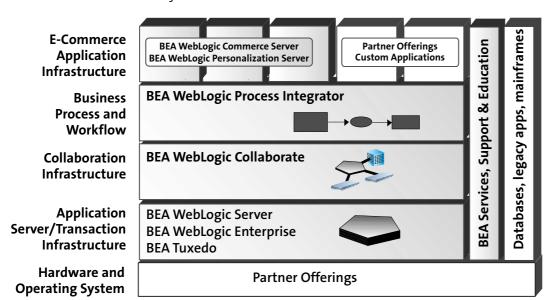


With the BEA WebLogic platform, your business can provide reliable service to customers, and scale up services to handle unpredictable levels of growth whether locally or globally. Services can be personalized to win customers' loyalty and build enduring relationships. The platform gives you the opportunity to flexibly collaborate with trading partners and customers across the entire chain of commerce, and adapt nimbly to an environment characterized by an increasing rate of change.

## **Platform Overview**

The BEA WebLogic E-Business Platform includes the following:

- Market-leading BEA WebLogic® Application Servers, including BEA WebLogic Server<sup>TM</sup>, BEA WebLogic Enterprise<sup>TM</sup>, and BEA Tuxedo®, for rapidly building, deploying, and managing e-business applications
- BEA WebLogic Commerce Server<sup>TM</sup>, for rapidly developing adaptable e-commerce applications
- BEA WebLogic Personalization Server<sup>TM</sup>, for building personalized applications that win and retain customers
- BEA WebLogic Collaborate<sup>TM</sup>, to support powerful new ways of linking and interacting with suppliers and partners
- BEA WebLogic Process Integrator<sup>TM</sup>, to automate business process workflow
- BEA WebLogic M-Commerce Solution<sup>TM</sup> based on WebLogic Server, to support mobile commerce and anytime, anywhere e-business
- BEA eLink<sup>TM</sup>, to integrate with enterprise systems and protect existing investments
- E-Business solutions Built on BEA<sup>TM</sup> from major ISVs, ASPs, SIs, and technology partners
- A wide range of education, customer support, and professional services to enable businesses to get in the game fast and integrate their e-business from end to end



The e-business infrastructure "stack" and the role of the multi-tiered BEA WebLogic E-Business Platform

With partner offerings, the BEA WebLogic E-Business Platform provides a complete solution for running an e-business — the products are integrated into a multi-tiered "stack" with interoperable pieces. Unlike other platforms requiring manual integration, the WebLogic Platform is built on the world's #1 application server, and integrates all products in the platform — including those that support real-time personalization, business process management, business collaboration within and across enterprises, and the ability to create and maintain dynamic e-markets.

# BEA WebLogic Application Servers: Rapidly Scale to Accommodate Growth and Volume

If a Web site like eBay, E\*TRADE, Amazon.com, FedEx, or Schwab even blinks, customers around the world are instantly frowning at their PC displays and legions of reporters are writing stories. Downtime is costing companies anywhere from \$22,500 (a very large book retailer, according to Forrester Research, Inc.) to \$6.5 million (brokerage operations, according to Contingency Planning Research, and Dataquest) per hour on average. But that's only a drop in the bucket compared to the real cost to the brand in the eyes of dissatisfied customers. To support growth in customers or volume in transactions, you need a reliable and scalable e-business infrastructure. Your e-business applications and your customers' transactions must work every time, 24x7, without fail, or you'll lose customers.

In a successfully conducted electronic transaction, all the reciprocal information on both sides of a business process is updated at the same time and the integrity of the information is guaranteed. Typically, distributed transactions across the Internet are not real time but asynchronous, meaning the initiator can start the transaction and then go about other business while the transaction proceeds, without regard to time passed, network outages, etc. The power of distributed transaction management is that the transaction can succeed despite delays and disruptions. Transaction and application servers coordinate complex transactions across multiple resources, guaranteeing transactional integrity in an environment with multiple users and systems accessing the distributed transaction resources at the same time. The servers turn potential chaos into smoothly coordinated commerce.

High-volume transactions on a global scale require a massively scalable infrastructure. The two core products of the BEA WebLogic E-Business Platform — BEA Tuxedo® and BEA WebLogic Server™ — have been the runaway market leaders in managing massive distributed transactions for years. That's why 3Com Corporation chose BEA WebLogic Server as the "official e-business software platform" of the Planet Project, the largest global poll ever (November 2000). The survey technology is built on 52 clustered CPUs of BEA WebLogic Server, capable of handling 4 million users per hour, 9,000 transactions every second. That's more than half a million transactions every minute, more than 32 million every hour, more than three-quarters of a billion every day. BEA is the one company that can handle such massive volume. And that's why BEA and WebLogic are two of the most trusted brand names on the Internet.

Adopted by leading e-businesses in all major industries, including financial services, telecommunications, transportation and retail, BEA WebLogic Application Servers offer the most complete platform for the full spectrum of Web and wireless e-commerce applications. BEA WebLogic Applications Servers provide the maximum flexibility in component-based application development, deployment, and management, while protecting your IT investments with unmatched adherence to industry standards.

#### **BEA WebLogic Server**

The #1 Java application server on the market, BEA WebLogic Server powers today's most demanding Web and wireless applications. With its advanced clustering architecture for scalability and high availability, BEA WebLogic Server is proven in more mission-critical e-business applications. It provides an industrial-strength set of services for building applications using the Java language and Java 2 Enterprise Edition (J2EE) platform, including Enterprise JavaBeans (EJB) components. No other application server features broader support for Java, EJB, and J2EE than BEA WebLogic Server, which won nine "Best of Category" awards in the past year from highly-regarded trade magazines including JavaWorld and Java Developer's Journal.

BEA WebLogic Server (version 6.0) provides significant core platform services that deliver increased reliability and scalability for transaction-intensive applications. These capabilities include a new distributed transaction manager; scalable clustering for Java Messaging Services (JMS); enhanced support for Extensible Markup Language (XML); and updated and certified J2EE standards support. BEA WebLogic Server offers the industrial-strength transaction technology of BEA Tuxedo with a transaction engine built in pure Java that offers distributed transactions with two-phase commit for rock-solid reliability.

BEA WebLogic Server provides the highest levels of scalability, expandability, and high-availability through clustering. BEA WebLogic Server provides both Web-page and EJB-component clustering — without any special-purpose hardware or operating system services. Web-page clustering handles transparent replication, load-balancing, and failover for the presentation logic that generates responses to Web clients (for example, the contents of a Web shopping cart). Component clustering handles the complexities of replication, load balancing, and failover for EJBs, or business logic, and recovery of stateful objects like EJB entity beans. Both Web-page and component clustering are critical for delivering global scalability and high availability for e-commerce systems.

The J2EE standards represent the most significant advance in enterprise software development since the relational database. With J2EE, companies can develop multi-tier distributed applications that are independent of the underlying hardware, operating system, and database, allowing programs running on one server to be moved to a different server without change. Companies using the Enterprise Java Platform benefit from shorter time-to-market and lower system development and administration costs. J2EE delivers unprecedented developer productivity through the Java programming language, the reusability of EJB components, standardization across platforms, and critical enterprise application services defined in the J2EE standard, enabling developers to focus on writing business logic and addressing business-critical issues.

"A major factor in our decision to use WebLogic," says Mitch Allen, chief operating officer and vice president, engineering and operations at Health Hero Network (HHN), "was its clear ability to handle the kind of growth we anticipate. Scalability is a crucial part of an efficient and cost-effective implementation of our service."

For example, BuildPoint.com relies on the scalability of BEA WebLogic Server to provide e-commerce services for contractors, materials suppliers, skilled trades people, equipment vendors, architects and engineers, and the countless other players involved in the multi-trillion-dollar global construction industry. "We are relying on BEA WebLogic Server for the most scalable and important part of our business model," says Andre Taube, BuildPoint's vice president of engineering. "Having successfully acquired the demand side of the marketplace equation, we are now set to provide the marketplace with the supply side. BEA WebLogic Server will help us continue to reap first mover advantage — an essential key to success in this industry — as well as provide the performance and scalability to handle potentially enormous growth in numbers of users and transactions."

#### **BEA Tuxedo**

BEA Tuxedo is the most widely deployed transaction server for building high-performance and reliable distributed applications across heterogeneous environments. Customers use BEA Tuxedo as the backbone for enabling transactions that stretch from front-end e-commerce applications to back-office processes, across any system, anywhere in the world.

In such a diversity of environments, platform independence is critical. With BEA Tuxedo, developers can successfully develop, manage, and deploy transactional applications completely independent of the underlying communications, hardware, and database environment. In fact, BEA Tuxedo has been ported to over 50 hardware and operating system platforms, including NT, Unix, Linux,

OS/400, OS/390, and Open VMS. As the predominant transaction-processing platform, BEA Tuxedo has been recognized as the industry benchmark for performance and scalability since 1998.

BEA Tuxedo provides a robust foundation for the development of open, distributed e-commerce applications. E-Commerce applications use an extended, multi-tier client/server model that may span many disparate hardware platforms, operating systems, client input devices, databases, etc. Developing applications within this environment requires sophisticated messaging services to manage the flow of transactions, and the coordination of application components across the nodes that make up a typical transactional e-commerce application. BEA Tuxedo provides these services so that application developers can create reliable, scalable applications that they can deliver in Internet time to meet ever-changing business requirements. Within this framework, BEA Tuxedo also provides a centralized administration subsystem that allows application administrators to control all cooperating nodes as a single application.

"Our technology has to be absolutely reliable," says Rob Carter, corporate vice president and chief technology officer for FDX Corporation (parent company of FedEx). "BEA Tuxedo provides a solid foundation for the many applications that allow us to deliver on our promises to our customers."

"We are constantly looking for ways to help our IT professionals work smarter, not harder," says Bruce Parker, chief information officer for United Airlines. "BEA's Tuxedo product has proven to be a reliable transaction processing engine with development projects enhancing United's Web site, ual.com."

#### **BEA WebLogic Enterprise**

BEA WebLogic Enterprise is a proven platform for building rock-solid, easy-to-manage e-business systems. BEAWebLogic Enterprise combines the features of BEA WebLogic Server and BEA Tuxedo to offer comprehensive services for building highly scalable and manageable Web-to-mainframe e-business solutions to meet the needs of large-scale, globally distributed e-commerce applications.

BEA WebLogic Enterprise offers the high productivity benefits of component-based development for building e-commerce solutions, leveraging industry standards for greater interoperability, portability, and tools support. It is the only integrated application server platform that allows you to develop solutions based on any combination of J2EE (Java), CORBA C++, and Tuxedo with C, C++, or COBOL.

BEA Weblogic Enterprise is the application server of choice for many businesses that need to launch e-commerce initiatives rapidly to maintain their competitive advantage. For example, Amazon.com handles millions of online transactions and uses BEA Weblogic Enterprise to support its current high level of customer service and ensure expansion to handle growing numbers of customers. NexTrade provides a high-volume stock trading system and uses BEA Weblogic Enterprise to maintain fast response and 24x7 availability during the current daily peaks—and as the volume of transactions scales up dramatically in the future.

"We looked at various application servers, and chose BEA WebLogic Enterprise because of its robustness, multi-platform portability, and scalability," says Michael Besack, director of POS.com Technologies' Transaction Processing Center for its Web-enabled point-of-sale application. "We felt that BEA WebLogic Enterprise, with the BEA Tuxedo engine behind it, was the sturdiest transaction system we tested outside of the mainframe world. The CORBA and Java portability were important to us, because with cluster-based processing you end up with a mixture of platforms. And scalability, given the distributed architecture, was critical. We need to be able to quickly scale to the hundreds of terabytes of data on a highly distributed architecture, performing millions of transactions a day. We felt that BEAWebLogic Enterprise is designed to give us the long-term scalability we need to do this and more."

"The benefit of using BEA WebLogic Enterprise is that now we can add new sales and distribution channels faster and more easily," says Oscar Nyströmer, project manager at Swedish State Railways, noting that they currently have around 10 distribution channels. "We no longer have to slowly and painstakingly distribute changes throughout each individual system as before, which impeded time-to-market. Now, any time we dream up a new way of selling tickets, new business rules, new passenger types, we need to change the system only in one central place, so all distributed clients and types will receive the new business logic automatically. BEA WebLogic Enterprise is designed to help us significantly improve our time-to-market."

# **Commerce and Personalization: Putting** the Customer Securely in Control

Your e-business platform must accommodate changes in customer habits and interests, and reflect those changes by making every customer interaction more personalized than the last. At a minimum, personalization is needed to make a site manageable by understanding visitors' needs based on their roles — for example, presenting the same information in different ways to customers, suppliers, and employees. The ultimate goal is to know enough about a customer's preferences and needs to intelligently suggest new services that they can use. The result is to turn a series of single transactions into a series of interactions that leads to an enduring, mutually profitable relationship. And personalization makes that happen.

With BEA WebLogic Commerce Server and BEA WebLogic Personalization Server, you can rapidly build and bring to market adaptable and personalized applications. These applications can be quickly leveraged for new opportunities by adding components and modifying the business logic. You can deepen customer relationships while also providing a secure transaction environment and customer control over their information.

Based on BEA WebLogic Server, the industry's #1 Java server, the WebLogic Commerce and Personalization Servers support secured networked applications with optional encryption, authentication, and authorization based on the RSA Secured Sockets Layer (SSL), X.509 certificates, and access control lists (ACLs). All BEA WebLogic Server services are securely available through firewalls via tunneling through HTTP or the SSL variant of HTTP (HTTPS).

Your business must quickly attract and retain customers to achieve competitive advantage and market leadership. The BEA WebLogic Commerce Server and Personalization Server enable adaptable e-commerce applications that can make every customer interaction more personalized than the last. You can capture information about your customers and share it with the business processes inside and outside your enterprise, and use it to enhance the customer experience, while also providing complete customer control over access to this information. This continuous process of capturing information and using it to personalize future interactions in a secure way ensures that your e-business is delivering relevant value that attracts and retains customers.

### **BEA WebLogic Commerce Server**

Adaptable, personalized applications are essential to building a future-proof e-business. Adaptable applications combine the benefits of fast time-to-market and easily customized software to deliver competitive advantage. Personalized applications target individuals or groups with customized content or features. Leveraging the pre-built commerce functionality in BEA WebLogic Commerce Server requires less testing and helps build applications rapidly. Rather than building the pieces that are common across e-commerce sites, you can better leverage your resources by focusing on the aspects of an application that are unique to your business. When the market demands change a flexible and extensible standards-based architecture helps you stay ahead of the pack.

BEA WebLogic Commerce Server is built on BEA WebLogic Server and contains an adaptable commerce platform coupled with BEA WebLogic Personalization Server. It was designed from the ground up to bring greater ease of use, flexibility, and extensibility to e-commerce applications and to greatly speed time to market. Different members of your organization perform various tasks such as creating user interfaces, site configuration, business administration and Java programming. BEA WebLogic Commerce Server facilitates an efficient division of labor that makes it easier for members of the team to focus on their particular areas of expertise and speed development. Buy for speed — or build and assemble for adaptability and competitive advantage? With BEA WebLogic Commerce Server you get the best of both worlds.

For example, Adecco, the largest staffing services company in North America, is using BEA WebLogic Commerce Server to take its core business process on-line. According to Adecco Chief Information Officer Dan Torunian, "BEA WebLogic Commerce Server will enable us to seamlessly link a number of key processes for our clients. And the more it is used, the more robust the data becomes. It's tailor-made for our customers."

QuinStreet, a company that provides e-commerce sales and marketing services for specialty consumer product companies and selling networks, uses BEA WebLogic Commerce Server to facilitate the distribution of a wide variety of product information and sales aids to the member selling sites affiliated with QuinStreet's specialty merchants. According to Aida Scott, Chief Technology Officer of QuinStreet, "We chose BEA WebLogic Commerce Server because it combines a reputation for quality with out-of-the-box functionality. This combination enabled us to jumpstart the implementation of individualized storefronts. Our next focus will be on using the Personalization Server to drive preferred relationships between our merchants and their customers."

### **BEA WebLogic Personalization Server**

BEA WebLogic Commerce Server includes the BEA WebLogic Personalization Server, which enables management of customer relationships with easy-to-use business controls that allow dynamic definitions of application behavior and the delivery of tailored content.

With the BEA WebLogic Personalization Server, you can add personalized marketing capabilities to your applications. Included as part of the BEA WebLogic Commerce Server, these products together allow you to quickly assemble e-commerce solutions that let you target individual customers with customized content. Marketing professionals can change the behavior of e-commerce applications with business controls that define interactions with individual customers — including what promotions they receive, what access they have, and what content they see. The same controls allow product managers to dynamically manage product catalogs and change pricing policies at multiple levels.

BEA WebLogic Personalization Server provides tools and templates to assemble portal interfaces that provide customers with rich, personalized Web experiences. As the foundation for e-commerce applications, BEA WebLogic Personalization Server provides personalized interfaces, unique content, and a consistent user experience across systems. Built on open standards, developers can easily extend and customize the BEA WebLogic Personalization Server to provide competitive advantages in e-commerce offerings.

WebLogic Commerce Server and WebLogic Personalization Server are especially adept at bringing order into the chaos of business-to-business commerce. For example, WW Grainger, the leading North American provider of maintenance, repair, and operating (MRO) supplies, built TotalMRO.com on BEA WebLogic Commerce Server. TotalMRO.com provides customers access to everything MRO, including easily searchable product information, contract pricing, and availability for millions of MRO products and services from major MRO distributors.

"BEA has provided us with a broad set of flexible and scalable e-commerce capabilities that are critical to drive and support the growth of our business," said Elizabeth G. Olig, president of TotalMRO.com. "BEA WebLogic Commerce Server allows us to easily customize and extend the application to the specific requirements of our business and our customers. [BEA] provided us with project scoping, prototyping, and full application development services to help us go live just 90 days after start of development — with a solution that we believe gives us a sustainable competitive advantage."

# BEA WebLogic Collaborate: Interacting with Trading Partners

As many companies have discovered, developing a business-to-business (B2B) e-commerce strategy is essential to business survival — but this task is far more daunting than simply launching a Web site. Like business-to-consumer (B2C) e-commerce, B2B e-commerce takes place 24 hours a day, every day, from all parts of the globe. However, B2B involves many more enterprise systems, business processes, trading partners and sheer transaction volume than its B2C counterpart. An e-business platform must reliably manage a variety of complex trading-partner interactions, handle high transaction volumes, and link disparate systems outside as well as inside the enterprise.

E-Business collaboration among trading partners can help speed new products or services to market, improve customer service, reduce inventory and supply chain costs, and ultimately increase shareholder value. BEA provides the infrastructure for this new B2B capability referred to in the B2B Internet Report as collaborative commerce, in which "conversations" among trading partners allow them to negotiate, not just pass along information. The infrastructure enables your company to manage every B2B activity as a seamless, integrated and secure business event, regardless of how long this "business transaction" takes or how many business parties or information technology (IT) systems are involved — internally or externally.

A simple analogy: You have probably visited a travel site that brings together travel content and the ability to conduct transactions with multiple service providers. Now imagine one that also lets you provide the equivalent of a "bill of sale" for a trip — everything from airline tickets, hotels, and rental cars to home security monitoring, frequent-flyer benefits, and housing for your pets. The site could then transact business with multiple trading partners in accordance with your purchasing criteria, so that you don't have to do all the work of finding services and negotiating prices. BEA provides the infrastructure for e-businesses to work together in an open market environment in which trading partners manage their own conversations and participation.

This is collaborative commerce, and it is the next big step for e-business. In a very real sense it extends the traditional boundaries of the corporation to the horizon and beyond, "allowing a degree of fluidity in transactions and collaboration traditionally possible only within the boundaries of the corporation," according to Philip Evans and Thomas S. Wurster, authors of *Blown to Bits: How the New Economics of Information Transforms Strategy*.

BEA WebLogic Collaborate provides the market's most comprehensive, flexible, and powerful technology to support your B2B strategies. "Utilizing a platform service, such as BEA WebLogic Collaborate, removes the time-to-market barriers for businesses that want to capitalize on e-market opportunities," said Daniel Sholler, senior program director at META Group. "They also provide a fast way for companies to dynamically collaborate over the Web with their partners." For the foreseeable future, e-market technologies and collaborative commerce business models will keep attracting companies in droves who wish to continue as market leaders into the next decade — as well as those who seek to displace the leading competitors who might not be as nimble. In fact, META Group predicts that in the next two years more than 35% of Global 2000 companies will adopt e-market technologies, growing to more than 65% by the year 2005.

BEA WebLogic Collaborate provides a powerful, single-platform solution for the rapid integration of customer, partner, and supplier business processes — from dynamic spot-supplier relationships to long-term, strategic partner contracts. Built on the industry-leading BEA WebLogic Server and compliant with J2EE, BEA WebLogic Collaborate provides a flexible, open architecture that is designed to ensure the reliability, flexibility and security of strategic B2B initiatives. BEA WebLogic Collaborate enables companies to move beyond constrained point-to-point integration with trading partners and delivers rapid time-to-market, cost savings, and competitive advantage.

# BEA WebLogic Process Integrator: Managing Process and Workflow

Legions of systems and applications are required to execute complex Internet-enabled business models. But the fact that so many disparate systems are involved in e-business creates problems of its own. In simplest terms, both IT managers and business analysts find themselves asking, "How do we get it all to work together?"

Mission-critical systems and applications are not separate from "the business side of the house" in an effective e-business. In the Internet economy, the speed at which new business processes (e.g., order is submitted, product availability is checked, customer line-of-credit is verified, order is confirmed...) are developed, deployed, and changed, is accelerating. IT organizations must provide the infrastructure required by business owners to further define, execute, and modify business processes as requirements change.

While systems are critical to effective execution, people define, deploy, manage, and make the decisions that enable e-business success. The automation of business has not replaced people, but has elevated human involvement to a higher level, enabling them to focus on exception management, process optimization, and competitive differentiation. The critical need here is to extend the workflow across the chain of commerce to include not only applications but also people. Straight-through automation bereft of human decision-making at appropriate points tips the balance too far to the technology side of the business. E-Business process rules and workflow needs to ensure the most efficient use of both machine and mind.

To effectively and efficiently drive and manage business processes involving both systems and people, process integration and workflow technologies are emerging as an enterprise solution to managing end-to-end business processes now and into the future. The complexity and speed of e-business has been the catalyst to move these technologies to a strategic role in the integrated enterprise. Increasingly, process technologies will be viewed as the "glue" that holds it all together.

BEA WebLogic Process Integrator is the "glue". Bundled with BEA WebLogic Collaborate and sold separately, BEA WebLogic Process Integrator provides a powerful, easy-to-use Java process tool that lets you graphically model, adapt, store and reuse complex inter- and intra-enterprise business processes without the need for extensive business process reengineering. Business processes involving interactions with many people and multiple applications are more efficient and effective if all the steps in the process are automated. BEA

WebLogic Process Integrator provides a welcome alternative to writing code to achieve business process automation. Using an intuitive flowchart paradigm, business analysts use the BEA WebLogic Process Integrator Design Studio to define business processes that span these applications or to automate human interaction with these applications. BEAWebLogic Process Integrator can also be used by developers to quickly assemble application components, with no programming required.

# WebLogic Server and the WebLogic M-Commerce Solution: E-Commerce Anytime, Anywhere

Your worldwide customers not only require localized, personalized, and reliable transactions, but they want them anytime, anywhere. Mobile e-commerce (m-commerce) extends the Internet to an array of mobile devices, enabling Internet transactions and personalized content. BEA provides the infrastructure for m-commerce with the BEA WebLogic Server and the BEA WebLogic M-Commerce Solution, enabling you to rapidly deploy reliable, personalized m-commerce applications. WebLogic Server is the m-commerce platform of choice around the world, supporting m-commerce solutions in Europe and the United States using the Wireless Access Protocol (WAP) and with the NTT DoCoMo I-mode service in Japan. WebLogic Server provides an integrated platform for building and deploying m-commerce and e-commerce applications on a common infrastructure, enabling companies to seamlessly extend their e-commerce initiatives to the mobile user or customer.

For example, Fujimic, Inc. of Tokyo, an affiliated company of Fuji Television Network, Inc., has built its I-mode wireless subscription service for content on demand (called Fuji Televi) on BEA WebLogic Server. "The reliability of BEA WebLogic Server ensures that we can handle the massive volume of requests that Fuji Televi subscribers generate — upwards of several million per day," says Tetsuji Osaka, director of the solution promotion department, Engineering Division, Fujimic Inc.

The BEA WebLogic M-Commerce Solution integrates the BEA WebLogic Commerce Server, including the market-leading WebLogic Server, with the Nokia WAP Server and a BEA Professional Services program specially designed for rapid development and deployment of m-commerce solutions. Built on open standards, including the Wireless Markup Language (WML) and Wireless Application Protocol (WAP), this enterprise m-commerce solution connects mobile users to content and applications hosted on the market-leading BEA WebLogic application and commerce servers. The BEA WebLogic M-Commerce Solution is designed for an enterprise to host the WAP gateway directly as part of its internal network. It enables you to conduct transactions for all users and customers consistently, across all types of devices and Internet connectivity.

# **BEA eLink: Integration and Investment Protection**

In today's enterprises, vast amounts of valuable information and business processes are locked away in legacy applications, platforms, and databases. Companies facing relentless time-to-market pressure must look at the entire e-business picture and what it will take to provide reliable, instantaneously scalable, and personalized services for e-generation customers. Applications within your enterprise must be working together like a well-oiled machine to manage, route and transform information in response to service requests originating from the Web.

The first step is to integrate the disparate, disconnected applications that are used within your enterprise. E-Generation customers expect fast responses, products tailored to their specific needs, and proactive customer service. These demands are difficult, if not impossible, to meet unless your unique business processes are linked together so that they can flow from beginning to end in a cohesive, coordinated fashion.

BEA eLink is a solution for rapidly and reliably integrating large-scale enterprise applications and business processes both inside a corporation and, across the Web, with suppliers, distribution partners and customers to accomplish strategic e-business initiatives. The BEA eLink family of products is a comprehensive integration technology infrastructure, including a robust and scalable integration server, and best-of-breed data integration and process management options. A robust and comprehensive business solution that can be rapidly implemented and easily maintained while supporting a heterogeneous mix of platforms, architectures, databases, and third-party applications, BEA eLink assures high performance, transparent access to mission-critical applications, and information across the network with a single, standard programming interface. BEA is the first in the industry to provide an extensive EAI product family that can be augmented with professional services and worldwide, around-the-clock support, all from a single source.

A sampling of BEA eLink customers shows the range of EAI solutions BEA eLink provides:

■ Bell Atlantic is using BEA eLink as a robust and scalable gateway to reformat and reliably transfer new customer orders for long-distance service from a mainframe-based processing system to an HP-9000 UNIX system.

- Portugal Telecom, Portugal's only full telecommunications service provider, uses BEA eLink as its core technology for integrating customer and financial applications that support its nationwide wireline business.
- The Societe Nationale des Chemins de Fer Français, the state-owned passenger and freight railway system of France, chose BEA eLink to integrate its mainframe and UNIX platforms.
- New Zealand's national television broadcaster TVNZ is using BEA eLink to build a strategic framework for integrating its multiple existing applications and for integrating new applications into the mix.
- Germany-based START AMADEUS, the largest travel services reservation system in Europe, is integrating BEA Tuxedo and BEA eLink into its network infrastructure to handle the flood of transactions from more than 1,000 new terminals in its production network.

# Global BEA Services: Removing the Risk

"Sites must pick a commerce platform — a software foundation for selling on the Web," writes David Truog in a Forrester Research report titled "Which Commerce Platform?" (October 1999). But, he adds, "Firms, vendors, and e-commerce integrators face a trade-off. While features in packaged products save builders time, they adapt poorly to business processes and don't differentiate companies from competitors. By custom coding instead, sites can achieve competitive advantage — but take longer and incur the risks that come with a software development project."

The BEA WebLogic E-Business Platform enables businesses to get in the game fast. Its design is optimized for rapid deployment, and it supports the standards that developers are familiar with. However, it is just as important that the platform is supported by a global services organization that can take the risks out of component software development projects.

BEA offers services and works with partners to get your e-business up to speed quickly. BEA takes the risk out of building an e-business using proven design and prototyping methodologies, superior product experience, and global follow-the-sun support. You should not have to waste time and IT resources with proprietary technologies, point-to-point products, or patchwork platforms that have not been proven to work. With extensive expertise in building e-commerce systems, BEA has the depth and breadth of high-level strategy and brass-tacks detail. BEA service offerings focus on more than just development issues (crucial though they are) — BEA views the lifecycle of an e-solution from a business perspective as well as an implementation perspective. This wider view gives BEA the unique ability to offer clients savvy, responsive, and reliable services as their business or the marketplace changes and grows. BEA is ready to meet a wide range of objectives throughout the lifecycle of an e-commerce project.

For example, BEA's education team provided customized curricula to coordinate the swift migration of BankBoston's IT staff from traditional mainframe and client/server application development to Web-based and e-commerce development. Approximately 40 BankBoston systems developers participated in the education programs in Web architecture, dynamic HTML and Java Script, Unix, object-oriented analysis and design with UML, component architectures (COM and CORBA), C++, and relational database design. In addition, BEA's education team worked with BankBoston to develop a series of classes for managers on Web-based technologies and architectures. The result: BankBoston's IT staff was brought up to speed on e-commerce in 11 weeks.

# **BEA Partners: Building on the Platform**

As the market leader, the BEA WebLogic E-Business Platform is the de facto standard adopted by ISVs, ASPs, SIs, and e-commerce technology providers. BEA works with partners to provide complete e-business solutions. Companies often have long-standing relationships with systems integrators, e-business architects, and IT consultants, and naturally they want to continue these outsourcing relationships. As such, the ideal situation is to be able to buy and implement the e-business platform of your choice in the manner of your choosing, working with the vendors with which you're most comfortable.

Partners work with BEA because BEA is well-known for providing the most robust, battle-tested e-business infrastructure software. This infrastructure — the BEA WebLogic E-Business Platform — has been tested in the most challenging circumstances and proven to ensure flawless transactions every second even at extremely high volumes of transactions. BEA is committed to investing aggressively in strategic partnerships so that you can do business with BEA easily through familiar and established relationships. There are four types of BEA partners:

- Professional Service Partners are systems integrators (SIs), Web integrators and consultants offering a focused skill set around BEA technology, such as custom applications.
- Solution Partners include independent software vendors (ISVs), application service providers (ASPs), and value-added resellers (VARs) that engage in an active sublicensing relationship with BEA to develop and deliver highly effective solutions for the e-commerce market.
- Technology Alliance Partners, such as ISVs, offer products complementar to BEA technology, enhancing BEA's total offering with tools, technology, application development, and platform delivery
- Strategic System Vendors are major hardware manufacturers with global influence and industry leadership offering solution bundles and systems integration.

BEA works closely with partners to deliver complete e-business solutions. For example, BEA WebLogic Commerce Server includes a limited license version of the Documentum 4i Web Content Management Edition and Interwoven Content Express so that you have a choice of proven content management solutions to speed your time-to-market. BEA has also integrated Broadbase Software's analytics and automated marketing system with BEA WebLogic Commerce Server and BEA WebLogic Personalization Server, so that you can create targeted campaigns and personalize online content.

## **BEA: How Business Becomes E-Business**

BEA Systems, Inc. is one of the world's leading e-business infrastructure software companies, with over 8,000 customers around the world including the majority of the Fortune Global 100. BEA and its WebLogic® brand are among the most trusted names in e-business. Businesses built on the award-winning BEA WebLogic E-Business Platform™ are reliable, highly scalable, and poised to bring new services to market quickly. The WebLogic platform is the de facto standard for over 1,000 systems integrators, independent software vendors (ISVs), and application service providers (ASPs) to provide complete solutions that fast-track and future-proof e-businesses for high growth and profitability Headquartered in San Jose, Calif., BEA has 89 offices in 30 countries and is on the Web at www.bea.com.