

WebSphere® software



**IBM WebSphere Application Server Family.**  
**Flexible infrastructure for today's business world.**

## ***Build on demand solutions with a more flexible infrastructure.***

Today's organizations face a tough set of challenges. Markets around the world have become increasingly volatile. Competition is more intense. Mergers, acquisitions and divestitures demand revisions in business plans and the IT infrastructures that support them. And IT departments have to keep doing more — and better — with budgets and resources that are already stretched to the limit.

To meet these critical challenges, organizations need much greater flexibility in terms of their business models and business processes. For IT, a flexible infrastructure has become essential to capitalize on changing market opportunities and manage costs in the face of increased budgetary pressures.

*“... a flexible infrastructure that can cope with constant change enables an organization to better manage market volatility and unpredictability.”*

*– D.H. Brown Associates, Inc.<sup>1</sup>*

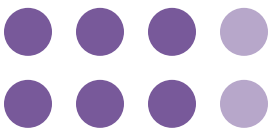
### **On demand solutions to increase flexibility and responsiveness**

On demand capabilities based on IBM solutions can help organizations address a rapidly changing business world. These solutions help integrate an enterprise's business processes end-to-end across the company and with key partners, suppliers and customers. Doing this can help organizations better respond with flexibility and speed to customer demands, market opportunities or external threats.

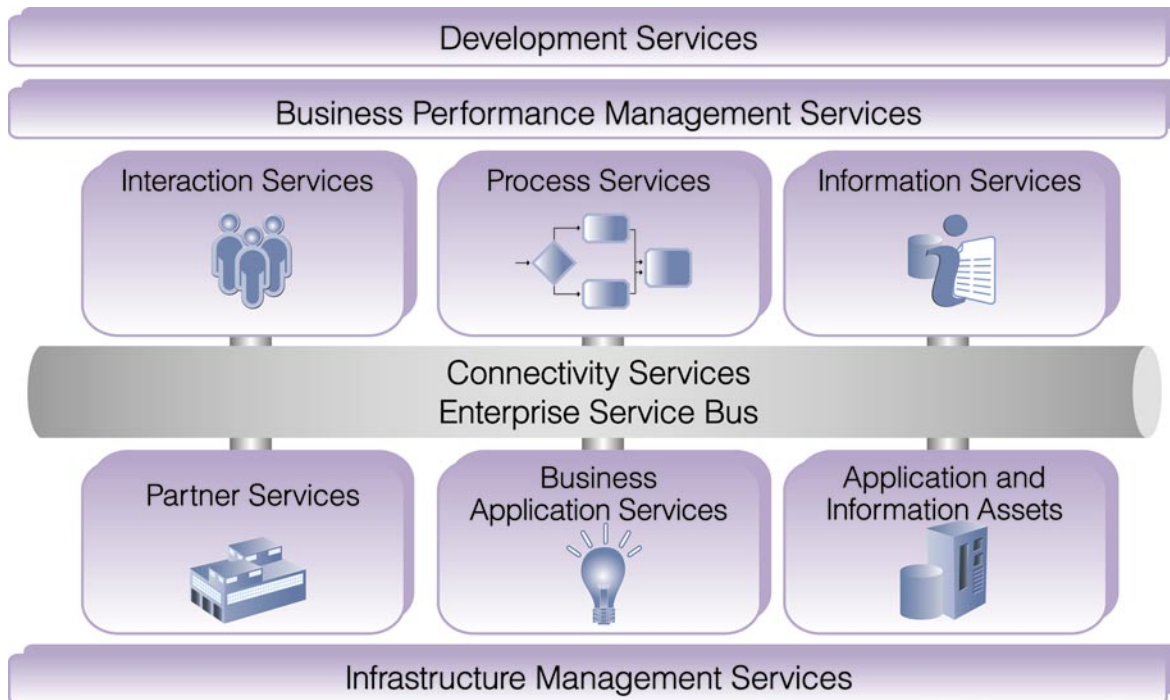
Building a strong, yet flexible application infrastructure can help:

- Align business models and processes with strategic goals and objectives to compete more effectively.
- Standardize, automate and integrate business processes and the underlying infrastructure to improve time to market.
- Scale quickly and cost-effectively to meet business demands while controlling risks.

With on demand solutions, your organization can respond faster, more effectively and far more efficiently to changing business conditions. For IT departments, the benefits can include the ability to leverage and optimize existing assets, to improve customer service as well as IT services within the enterprise, and to better support rapid development and deployment of new technology.



## IBM WebSphere Integration Reference Architecture



*The breadth of robust software capabilities from IBM WebSphere are delivered through a modular product portfolio, connected in a flexible, open reference architecture. The IBM WebSphere Integration Reference Architecture enables organizations to realize the value of a fully integrated Service Oriented Architecture (SOA) using the proven WebSphere platform.*

### **A strategic foundation**

IBM WebSphere® software provides a strategic foundation for on demand solutions through a comprehensive development platform that is implemented as a Service Oriented Architecture (SOA). IBM WebSphere Application Server is a key building block of the Reference Architecture, providing a Java™ 2 Enterprise Edition (J2EE) offering for building, deploying and running on demand applications.

With standards-based messaging and support for the latest Web services standards, WebSphere Application Server enables you to reuse existing assets and increase your return on existing investments. This allows you to get the most out of your current IT environment while implementing new, on demand applications.

A recent IBM implementation for Goodyear, the world's largest tire manufacturer, illustrates the benefits of the WebSphere Application Server family. In the past, Goodyear dealers were sometimes unable to get information on products, prices, specials, inventory availability and order status when they needed it. Goodyear responded to this need with an on demand solution including the WebSphere Application Server family that provided dealers with product and marketing information as well as the ability to place and track orders — all in real time.

Since implementing the solution, Goodyear has seen a four-fold increase in volume while providing nearly 100 percent uptime. In addition, out-of-the-box functionality has enabled Goodyear to lower application management costs. By employing a standardized solution, Goodyear has also been able to rapidly and cost-effectively respond to dealer requests for new services.

### The WebSphere Application Server Family of Products



The IBM WebSphere Application Server family of products can help organizations achieve on demand business flexibility.

## **An integrated family of products**

The WebSphere Application Server family of products provides a full range of features for on demand business.

The following features are common to all WebSphere Application Server configurations.

- Builds and deploys powerful Web services and messaging applications quickly and easily using features such as Java Server Faces and Service Data Objects
- Reduces the skills and programming steps required to build an application with the rapid deployment features
- Enables your existing Java assets for reuse and extends their reach with Web services support and a pure-Java JMS engine
- Enhances flexibility through broad, cross-platform support and common, Web browser-based administration across the whole product family
- Builds a security-rich, robust IT infrastructure based on open industry standards with J2EE Version 1.4 compliance

At the same time, each product in the WebSphere Application Server family offers unique functions and benefits geared to organizations of different sizes with specific needs.



### **IBM WebSphere Application Server – Express (WAS – Express)**

WAS – Express can help boost productivity quickly and easily, providing a cost-effective entry point to the development and deployment of dynamic Web applications. With basic, on demand capabilities, WAS – Express features an integrated Web application server and development environment that allows you to build and manage dynamic Web sites with easy-to-use development and administration tools that can help you make the most of existing skills. And with integrated applications, like the Telephone Directory application, you can deploy quickly to realize immediate value.

### **IBM WebSphere Application Server (WAS)**

The industry's leading J2EE and Web services application server, WAS delivers a high-performance and extremely scalable transaction engine for dynamic business applications. Designed for organizations requiring an enterprise-level solution, WAS serves as a robust foundation and "SOA building block" for integrated WebSphere implementations. WAS is optimized for ease of administration in a single-server deployment environment.

### **IBM WebSphere Application Server for Developers (WAS for Developers)**

WAS for Developers is the functional equivalent of the core WebSphere Application Server configuration, providing an easy-to-use development environment to build and test on demand business applications.



### WebSphere Application Server Family Awards

- Top Application Server, *Network Computing* (2005)
- Gold Award for Application Server – IBM WebSphere Application Server, *Asia Computer Weekly* (2005)
- Channel Champion, Integration MiddleWare category, *CRN* (2005).
- Best Web Infrastructure and Software, *VARBusiness* (2004)
- Best Web Services Solution, *Codie Awards* (2004)
- World Class Solution Award, *DMReview* (2004)

### IBM WebSphere Application Server Network Deployment (WAS ND)

WAS ND helps ensure 24x7 availability of business-critical Java applications with High Availability (HA) and backup cluster support. It provides extensive HA capabilities and is meant to be used as part of an overall, continuous availability solution. It has a built-in HA Manager responsible for running key services on available servers, rather than on a dedicated one, based on user selectable HA policies.

WAS ND can take advantage of technologies that significantly lower the cost and complexity of HA configurations. It offers hot standby and peer failover for critical services. With WAS ND, the configuration of HA Systems is simplified. It works out of the box, with no additional administration required for the most commonly used topology. The HA Manager and Unified Clustering Framework can help eliminate lost business opportunities with near-continuous uptime for mission-critical applications. And WAS ND provides extended Web services through a Web services gateway, which can help developers and IT managers externalize a Web service so that users can invoke it from outside of the firewall.

### IBM WebSphere Extended Deployment (WS XD)

WS XD extends the capabilities of WAS ND to deliver a manageable, dynamically scalable, high-performance environment for distributed WebSphere applications. The application supports scaling on demand, simplifies operation management and improves quality of service for applications running very high transaction volumes. WS XD can dynamically accommodate variable and unpredictable business demands, while helping to reduce the time and cost associated with managing a complex deployment environment.

### IBM WebSphere Application Server for z/OS (WAS for z/OS)

WAS for z/OS® combines the features of WAS ND with the reliability and availability of the IBM @server zSeries® and S/390® products. Using zSeries Application Assist Processor (zAAP), a specialized Java processor for zSeries, may drastically reduce the total cost of running new Java workloads on the mainframe. By integrating with the zSeries portfolio of hardware and z/OS software assets, and by utilizing the qualities of service of the platform—such as close proximity to data, intense scalability and rich security—WAS for zOS provides a strong application server environment.

### Addressing business needs with the WebSphere Application Server family

The WebSphere family of products successfully addresses a variety of business needs. One example involves Delta Lloyd NV, a leading financial services provider in Europe. Delta Lloyd executives realized that the company needed to streamline and improve its claims handling process. Delta Lloyd chose Claims Manager from IBM Business Partner FINEOS. IBM components of the solution included WebSphere products, IBM OS/390 and IBM AIX®.

Benefits have included a one percent annual reduction in total damages paid out — approximately 2 to 2.5 million euros a year. Risk assumption and pricing have improved. And staff turnover is lower, leading to increased productivity and reduced hiring and training costs. Maintenance costs have also been significantly reduced.

#### The benefits to your organization

To help you develop the IT solutions you need, the WebSphere Application Server family of products:

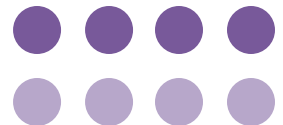
- Helps increase your return on investment and lower your total cost of ownership by reusing existing IT assets using standards-based messaging and the latest Web services standards.
- Helps you do more with less by scaling quickly and securely across the broadest set of platforms in the industry.
- Eliminates lost business opportunities with near-continuous uptime for mission-critical applications.
- Improves time to value and makes the most of existing technology skills with features enabling ease of use and real out-of-the-box performance.



#### Learn more from IBM

With IBM and the award-winning family of WebSphere products, you can fully address the challenges of a rapidly changing business world. Find out how flexible, on demand solutions from IBM can help you manage costs, streamline processes, enhance development and improve information management across your enterprise.

For more on the WebSphere Application Server family of solutions, visit [ibm.com/software/webservers/appserv/was](http://ibm.com/software/webservers/appserv/was)





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6-05  
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- 1 D.H. Brown Associates, Inc., white paper prepared for IBM. IBM WebSphere Application Server, Version 6, Delivers Business Flexibility. September 2004.