IBM WebSphere Application Server V4.0, Advanced Edition for Linux Now Available for IBM @server zSeries

Overview
WebSphere™ Application Server V4.0, Advanced Edition for Linux on zSeries continues to deliver on the IBM commitment to maintain broad platform coverage for the WebSphere Application Server.

Powerful Combination
- Rich feature set and open standards support of WebSphere Application Server
- Familiar operational environment of the Linux operating system
- Management facilities, high reliability, and intense internal data communication speeds of the zSeries hardware platform

Managing Your Applications
WebSphere Application Server manages and integrates enterprise-wide applications while leveraging open technologies and APIs. WebSphere Application Server V4.0 makes open standards the core element in many e-business solution offerings with deployment services and transaction management. It features:
- Powerful Web services for interoperability and business-to-business applications
- Unparalleled connectivity with transaction management and application adaptivity

Familiarity of Linux; Manageability of zSeries
- The Linux operating system delivers the familiarity of a UNIX operating system with SuSE and TurboLinux releases for the zSeries platform.
- The zSeries and S/390® hardware platforms deliver the reliability and system management capabilities that go with their reputation.

Key Prerequisites
- TCP/IP and network interface support
- zSeries Developer Kit for Linux, Java™ 2 Technology Edition (JDK 1.3.0 SR 10)
- DB2® 7.2 FP4
- SuSE 7.0 (kernel level 2.2.16) or TurboLinux Server 6.5 (kernel level 2.2)
- IBM HTTP Server 1.3.19.1
- KDE/kwm window manager

Planned Availability Dates
- December 31, 2001, electronic delivery
- January 31, 2002, program package

At a Glance
New WebSphere Application Server V4.0, Advanced Edition features include:
- Support for SuSE 7.0 and TurboLinux Server 6.5 for the zSeries environment
- Integrated support for Web service open standards, positioning WebSphere Application Server as the industry’s premier production ready Web application server for the deployment of enterprise Web service solutions for dynamic e-business
- Full Java 2 Enterprise Edition (J2EE) platform support with the richest enterprise Java open standard implementation on the market today
- Unparalleled connectivity provided by a preview implementation of Java 2 connectivity (J2C), with support for J2EE-based connectors
- Powerful interoperability between Web services and J2EE, enabling solution offerings for collaboration, business-to-business, portal serving, content management, commerce, and pervasive computing

For ordering, contact:
Your IBM representative, an IBM Business Partner, or IBM Americas Call Centers at 800-IBM-CALL
Reference: LE001
**Description**

WebSphere Application Server V4.0, Advanced Edition adds the following features to its already function-rich environment.

**Platform Support**

WebSphere Application Server V4.0 now supports Linux distributions for the zSeries platform, including SuSE Linux and TurboLinux Server. Consistent function and capabilities extend across all supported platforms. The expanded list of platforms also includes Windows NT®, Windows® 2000, AIX®, Sun Solaris, HP-UX, S/390, z/OS®, and Intel-based platforms for Red Hat, SuSE, TurboLinux, and Caldera.

**Powerful Web Services**

Version 4 delivers the broadest enablement of enterprise applications and assets to Web services via its unparalleled connectivity and interoperability options:

- Universal Description, Discovery, and Integration (UDDI) enables e-business applications to communicate with the UDDI business registry.
- Simple Object Access Protocol (SOAP) provides a common format for transporting messages to and from a UDDI registry.
- XML enables flexible and interactive application communications.
- Web Services Description Language (WSDL) enables any Java-based application to interoperate with Web services applications.

These integrated Web services extend WebSphere leadership in Web-based distributed transactions to dynamic e-business solutions. Coupled with the upgraded XML parser, based on the open source Apache Xerces product and Apache Xalan database, Web service support provides a high degree of flexibility within the foundation Web application server.

**Rich J2EE Open Standards Implementations**

Full J2EE compatibility is only the beginning, with rich turbocharged enterprise Java implementations built in, and support for the full range of Java-based APIs and protocols.

- Compliance with Enterprise JavaBeans (EJB) 1.1 component technology. EJB 1.1 uses XML-formatted descriptor information for increased levels of connectivity and control.
- Support for JDK 1.3 across operating system platforms.
- Improved Java security APIs in the distributed security model. Commands formerly provided through TCL scripts can now be performed using the new Java API.

**Connectivity**

**J2C Resource Adapters:** WebSphere Application Server V4.0, Advanced Edition includes a technology preview of the J2EE Connector Architecture based on the current version of the specification, which is not yet finalized. The following resource adapters for enterprise systems can be used for evaluation and testing until the specification is finalized. Connector support cannot be put into production.

- WebSphere Adapter for mySAP.com V1.0
- WebSphere Adapter for PeopleSoft V1.0
- CICS® Transaction Gateway (CTG) V4.0, ECI and EPI
- WebSphere Adapter for IMS™ 1.0
- WebSphere Adapter for J.D. Edwards V1.0
- WebSphere Adapter for Oracle Applications V1.0
- HOD J2EE Connector 6.0

**Java Database Connectivity (JDBC)**

- Consistent method of calling application and resource adapters and connectors
- Emerging de facto open standard for managing heterogeneous enterprise systems
- Continued support for SequelLink JDBC database drivers and Oracle
- In concert with SequelLink JDBC database drivers, added support for Microsoft™ SQL Server
- Informix

**Java Message Service Extended Architecture (JMS-XA):** JMS-XA enables coordinated transactions through reliable, asynchronous messaging with MQSeries®.

**Interoperability**

Powerful interoperability between Web services and J2EE enables solution offerings for:

- Collaboration
- Business-to-business
- Portal serving
- Content management
- Commerce
- Pervasive computing

Open, flexible application deployment with a rich set of application execution services is integral to any WebSphere solution offering. WebSphere Application Server V4, Advanced Edition is a core element of these offerings, and provides compatibility and interoperability with other products, including:

- Lotus® Domino™ for e-collaboration
- WebSphere Commerce Suite for e-commerce
- WebSphere BtoB Integrator for business-to-business communications and Web services applications
- MQSeries for reliable and asynchronous messaging
- WebSphere Everyplace™ Suite for pervasive and mobile computing
- WebSphere Business Components
- VisualAge® for Java and WebSphere Studio for development

**Performance and Scalability**

WebSphere Application Server provides extensive performance, scaling, security, and control features for your advanced e-business applications:

- New performance tuning wizards and improved resource and log analyzers help optimize your transactional Web sites.
A new Java Naming and Directory Interface (JNDI) cache stores name server requests on behalf of Web applications deployed in WebSphere. For applications that require many name server calls, application speed is substantially improved.

With enhancements to the connection pooling algorithms and support for dynamic reloading of EJB components, WebSphere Application Server V4.0, Advanced Edition provides a highly scalable, high-performance deployment environment.

**Superior Security with Interactive Web Application Serving**

WebSphere Application Server V4.0, Advanced Edition includes an interface for applications to interact with the WebSEAL component of Tivoli® Policy Director. A Web application running in WebSphere calls Policy Director for coexistence with existing user and application policies, adding a level of authorizations for your server-side execution environments.

An upgrade of the Lightweight Directory Access Protocol (LDAP) client interface is also included for accessing directory services throughout the network.

Added support for hardware crypto accelerators and smart cards to both WebSphere Application Server and IBM HTTP Server helps improve the performance of protected client/server and server/server communications.

- Crypto hardware increases your server’s throughput, lowering client wait time. Used with the storage feature, it provides robust security for management of private keys by storing them in dedicated hardware while in use and encrypting them when idle. Private keys never leave the module unencrypted.
- Smart cards enable greater mobility and enhance security by allowing users to carry their certificates with them.

**Transaction Management**

The EJB engine, supporting the latest EJB technology, monitors and controls containers used within the server. Persistent storage for transactional EJB components includes support for:

- DB2, distributed as part of the product
- Oracle databases
- Sybase
- Microsoft SQL Server
- Informix

**Application and Migration Tools**

WebSphere Application Server V4.0, Advanced Edition offers outstanding application and migration tools, including:

- Extensive logging and tracing facilities
- Online transaction debugger
- Deployment tool accessible through the administration user interface and from the command line

Application assembly tool to define and create deployment of descriptor information for J2EE application modules and assemble all required application components to build those modules

- Resource analyzer, a stand-alone performance monitoring tool
- Performance tuner wizard, a step-by-step guide for tuning key performance parameters
- Migration tools:
  - Migrate configuration information from existing V3.0 and V3.5 environments and from WebSphere V4.0 Advanced Single Server Edition
  - Convert applications to J2EE-compliant applications
- Integration with WebSphere Studio, including easy-to-use Web development tools for teams to create, manage, debug, and deploy multiplatform Web applications for Web browsers and pervasive devices

**One-Touch Installation**

- Complete and accurate Web-based documentation center enables users to get started right away.
- Improved installation and administration procedures offer a rich and flexible set of selectable configurations and prerequisites for tailored, open, and complete solutions.
- Separately installable, EJB client environment application enables easier setup on a Web client machine of an EJB-compatible environment. This allows direct invocation of EJB component applications from client machines, bypassing the HTTP path through a Web server. The result is much faster execution, with more direct communications with EJBs and a shorter code path.
- New and improved IBM HTTP Server (powered by Apache) includes additional facilities for content repository management and performance (via fast response caching), hardware crypto accelerators, and smart cards.

**Building on a Firm Foundation**

This new version is a consistent e-business application deployment environment with a rich set of application services across operating platforms and implementations of leading-edge Java technologies and APIs. Included is improved support for the beans scripting framework to benefit users who generate applications with scripting. WebSphere Application Server V4.0, Advanced Edition focuses on open standards, Web services, robust security, and connectivity to deliver a powerful, high-performance Web application server that is integral to solution offerings for commerce, collaboration, BtoB, and content management.

**Related Information**

WebSphere Application Server V4.0, Advanced Edition includes software developed by the Apache Group for use in the Apache HTTP server project. For details, visit:

http://www.apache.org/

For updates to the following, visit:

The deployment environment of WebSphere plugs into the following Web servers:

- Apache Server Version 1.3.20 for Windows 2000 SP 2, Windows NT, Sun Solaris, AIX, HP-UX, and Linux on S/390 and z/OS
- iPlanet Web Server Enterprise Edition 4.1 SP7 for Windows NT, Windows 2000, Sun Solaris, AIX, and HP-UX
- Microsoft Internet Information Server Version 4.0 on Windows NT
- Microsoft Internet Information Server Version 5.0 on Windows 2000
- IBM HTTP Server V1.3.19 for Windows NT, Windows 2000, Sun Solaris, AIX, HP-UX, and Linux on S/390 and z/OS
- Lotus Domino Application Server Release 5.0.5 and 5.0.6 for Windows NT, Sun Solaris, AIX, and HP-UX

For easier and more cost-effective development of applications, you can download a development copy of the primary component (Java application engine) from:

http://www.software.ibm.com/webservers

This copy is for use in the development and testing, but not the deployment, of Web applications and no support is provided. Users are required to agree to these terms before completing the download. IBM reserves the right to withdraw this offer at any time without further notice.

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Offering Information

Product information will be available on day of announcement through Offering Information (OITOOL) at:

http://www.ibm.com/common/ssi

Publications

A printed copy of the Getting Started document is shipped with the product. Help for the WebSphere Administrative Console is also shipped with the product. The Information Center, which includes the total set of product documentation, is available in HTML and PDF format from the Web site:


For optimal viewing of this documentation users need a Web browser that supports HTML 4 and Cascading Style Sheet (CSS). Terms and conditions for use of the machine-readable files are shipped with the files.

Technical Information

Hardware Requirements

- IBM @server zSeries server running Linux distribution SuSE 7.0 (kernel level 2.2.16) or TurboLinux Server 6.5 (kernel level 2.2)
- Minimum 150 MB free disk space for installation
- CD-ROM drive
- Minimum 256 MB of memory, 512 MB recommended

Software Requirements: For updates to the following requirements, visit:


- Netscape Navigator V4.76, or later, or Microsoft Internet Explorer V5.5 SP1, or later
- TCP/IP and network interface support
- zSeries Developer Kit for Linux, Java 2 Technology Edition
- DB2 7.2 FP4
- IBM HTTP Server 1.3.19.1
- GNU Standard C++ Library (libstdc++) level 2.9.0
- KDE/kwm window manager

Planning Information

Packaging: WebSphere Application Server V4.0, Advanced Edition for Linux on zSeries is shipped in one package that contains the following:

- IBM International Program License Agreement (IPLA)
- License information (LI)
- IPLA Pointer Sheet
- PPA Media Pack Pointer Sheet
- Two CD-ROMs

This program, when downloaded from a Web site, contains the applicable IBM license agreement and LI, if appropriate, and will be presented for acceptance at the time of installation of the program. The license and LI will be stored in a directory such as LICENSE.TXT for future reference.

Security, Auditability, and Control

WebSphere Application Server V4.0, Advanced Edition for Linux on zSeries uses the security and auditability features of the respective operating systems.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Ordering Information

WebSphere Application Server V4.0, Advanced Edition for Linux on zSeries is a server product with one charge unit — processors. It is available in units of one. The Processor Program Package (CD-ROM) is required for every processor on every server.

The price of WebSphere Application Server V4.0, Advanced Edition for Linux on zSeries is based on the number of processors in the system or node that run all or any part of the WebSphere Application Server V4.0, Advanced Edition for Linux on zSeries applications.

For example, two 4-way symmetric multiprocessor systems, whether stand-alone systems or nodes in a larger system, require eight WebSphere Application Server V4.0, Advanced Edition for Linux on zSeries processor program packages.

This announcement is provided for your information only. For additional information, contact your IBM representative, call 800-IBM-4YOU, or visit the IBM home page at: http://www.ibm.com.
Passport Advantage

Program Name/Description

WebSphere Application Server V4.0
Advanced Edition for Linux
on zSeries
Processor Media Pk — NLV
LIC/SW Maint 1 Anniv
SW Maint RNWL 1 Anniv
SW Maint AFT LIC 1 Anniv
from WebSphere Application Server
Standard TRD/LIC/SW
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Terms and Conditions

Licensing: IPLA. Proofs of Entitlement are required for all authorized use.

LI Form Number: LC23-4620-00

Limited Warranty Applies: Yes

Program Services: Available until September 30, 2003

Money-Back Guarantee: 30-day, money-back guarantee, applicable to the first instance per customer enterprise. The money-back guarantee will commence on the Invoice Date.

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Note: Shipments will begin after the planned availability date.

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