IBM WebSphere Application Server V4.0 for z/OS and OS/390 Offers a J2EE-Compliant Platform

Overview

WebSphere™ Application Server V4.0 for z/OS and OS/390 is an e-business application deployment environment built on open standards-based technology. As the cornerstone of WebSphere application offerings and services, it supports servlets, JavaServer Pages (JSPs), and Enterprise JavaBeans (EJBs), in compliance with Java™ 2 Enterprise Edition (J2EE) specifications. Version 4.0 brings together the functions of Version 3 Standard Edition and Enterprise Edition into a single product.

WebSphere Application Server V4.0 for z/OS and OS/390 continues to support connector access to CICS®, IMS®, and DB2®, as well as connections to applications that run on Web servers, CORBA application servers, and back-end systems such as DB2, CICS, and IMS, as was provided in WebSphere Application Server Version 3 for OS/390.

Included with the application server is Software Development Kit (SDK) 1.3.0, which provides the base support for applications at the Java 2 API level.

Key Prerequisites

- Any hardware that supports the OS/390 V2 R8, or later, or z/OS.
- Binary floating point hardware, such as S/390® Parallel Enterprise Server — Generation 5, and higher, systems, is highly recommended.
- Systems without binary floating point hardware, currently running applications on WebSphere Application Server V3.02 for OS/390, should consider a hardware upgrade to address performance concerns before upgrading to WebSphere Application Server V4.0 for z/OS and OS/390. Refer to the Performance Considerations section.
- DB2 Version 7.1, or later.

Planned Availability Date

March 30, 2001

At a Glance

WebSphere Application Server V4.0 for z/OS and OS/390 is an integrated enterprise Java server that takes full advantage of the qualities of service offered by the z/OS and OS/390 operating environments. It includes Software Development Kit (SDK) 1.3.0 and supports:

- Web components (servlets and JavaServer Pages) compliant with Java 2 Enterprise Edition (J2EE) V1.2 specifications
- Enterprise JavaBeans (EJBs) compliant with J2EE specifications
- CORBA components consistent with the WebSphere family programming model
- Basic applications at the Java 2 API level

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

Reference: LE001
WebSphere Application Server V4.0 for z/OS and OS/390 is delivered as a single offering, along with the SDK 1.3.0. It includes the following elements as part of its Web deployment environment:

- Support for deployment of J2EE, including:
  - EJB Version 1.1 specification level
  - Deployment of Java servlets written to the JavaSoft Version 2.2 specification level
  - Deployment of JSPs written to the JavaSoft Version 1.1 specification level
  - Remote method invocation (RMI) using Internet inter-ORB protocol (IIOP)
  - Object by value
  - Access to J2EE services from Java Business Objects
  - Java Transaction API (JTA)
- Integrated run time
- Highly secure Web deployment environment with Kerberos as the backbone and SSL as the endpoints
- Java RAS services integrated with existing RAS services and quality of services for z/OS and OS/390
- Support for interoperability with:
  - WebSphere Application Server for distributed platforms
  - CICS TS V1.3, or later, for inbound IIOP support
  - Products from other vendors that comply to the supported levels of the J2EE specification. After March 30, 2001, the following Web site will list the products for which IBM has tested interoperability with WebSphere Application Server V4.0 for z/OS and OS/390.

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

- Workstation-based support for administration and operations applications, used to install, deploy, and manage WebSphere for z/OS applications

SDK 1.3.0 is shipped with WebSphere Application Server V4.0 for z/OS and OS/390. This SDK provides the base support for applications at the Java 2 API level. You can use this level or one already installed at a higher service level.

This product includes software based on technology developed by the Apache Software Foundation. For more information, visit:

http://www.apache.org/

Euro Currency

This program is not impacted by euro currency.

Product Positioning

WebSphere Application Server V4.0 for z/OS and OS/390 extends the S/390-zSeries role as a premier server for enterprise e-business and exploits the OS/390-z/OS hallmark qualities of service such as scalability, performance, security, and availability.

Through the incorporation of open industry standards (such as HTML, HTTP, IOP, and CORBA) and J2EE-compliant Java standards for servlets, JSPs, and EJBs, new e-business applications and transactions can now be scaled up for global deployment on the server of choice, regardless of the development platform. Furthermore, new applications can be integrated with the extensive inventory of existing OS/390 applications. The result is the rapid creation of production-ready e-business applications, along with the ability to evolve to the EJB or CORBA-based deployment model of choice.

Reference Information

For information on the Web, visit:

- WebSphere Application Server Family
  http://www.ibm.com/software/webservers/appserv/
- S/390 e-business Internet — for a wide range of information including the latest announcements, customer success stories, and technical information:
  http://www.ibm.com/s390/ebusiness/
- OS/390 Planning Assistant for e-business — this interactive tool lets you access OS/390 data:
  http://www.ibm.com/s390/ebiz/
- z/OS and OS/390 Guides to e-Business Connectors — these white papers give z/OS and OS/390 customers advice on how to choose the e-business connectors for their existing subsystems (CICS; DB2; IMS). Visit:
  http://www.ibm.com/eserver/zseries/ebusconnectors
- Enterprise Connection Conference Calls provide an excellent way for you and your staff to keep current on S/390 technology and solutions. These no-charge sessions allow you to listen and speak to recognized experts from the convenience of your own office:
  http://www.ibm.com/s390/events/
- Patterns for e-business — this site is for anyone with a need to create an e-business solution:
  http://www.ibm.com/software/developer/web/patterns/

For additional information, refer to Software Withdrawals 901-063, and 901-053, dated March 6, 2001.


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Java is a trademark of Sun Microsystems, Inc.

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Services

SmoothStart™ /Installation Services

SmoothStart Services, an on-site implementation and training startup service, is designed to accelerate productive use of your IBM solution. The service is provided by IBM Global Services or your IBM Business Partner at an additional cost. SmoothStart Services for z/OS and OS/390® Web Servers offer installation, configuration, and customization of your HTTP Server and WebSphere™ Application Server software on the zSeries and S/390® platforms. These services use the most current releases of IBM HTTP Server for OS/390 and WebSphere Application Server to customize your established host system component software and create an initial home page with up to four additional Web pages. For more information, visit:


Global Services Offerings

Performance Management and Capacity Planning Services for OS/390 Web Servers:

This service analyzes OS/390 systems that support Web Server implementation. Experts can help improve the performance of your OS/390 operating systems by identifying performance problems or capacity exposures. To help you plan for the system resources required to support your Web Servers, IBM can model configurations based on your projected business growth and performance objectives. When the performance analysis or capacity planning service is completed, you receive a documented report of the findings and recommendations. For more information, visit:

http://www.ibm.com/services/ism/performance/

Education Support

Call IBM Education and Training at 800-IBM-TEACH (426-8322) for catalogs, schedules, and enrollments.

Offering Information

Product information is available through Offering Information (OITOOL) at:

http://www.ibm.com/wwoi

Publications

The publication WebSphere Application Server V4.0 for z/OS and OS/390 (GA22-7833) is available.

The following publications are available only via the Web at:

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

WebSphere Application Server V4.0 for z/OS and OS/390 Publications

• Program Directory
• Licensed Program Specifications
• Installation and Customization
• Assembling J2EE Applications
• Assembling CORBA Applications
• Operations and Administration
• Messages and Diagnosis
• System Management User Interface
• Systems Management Scripting Application Programming Interface

Publications that are common between z/OS, OS/390, and Windows™ platforms

• Component Broker Programming Guide
• Component Broker Advanced Programming Guide
• Component Broker Programming Reference
• Component Broker Application Development Tools Guide
• Component Broker Glossary

Common WebSphere Publications

• Getting Started with WebSphere Application Server
• Writing Enterprise Beans in WebSphere
• Building Business Solutions with WebSphere

Technical Information

Hardware Requirements: For WebSphere Application Server V4.0 for z/OS and OS/390:

• Any hardware that supports the OS/390 V2 R8, or later, or z/OS.
• Binary floating point hardware, such as S/390 Parallel Enterprise Server™ — Generation 5, and higher, systems, is highly recommended.
• Systems without binary floating point hardware, currently running applications on WebSphere Application Server V3.02 for OS/390, should consider a hardware upgrade to address performance concerns before upgrading to WebSphere Application Server V4.0 for z/OS and OS/390. Refer to the Performance Considerations section.

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.
Workstation hardware requirements for workstation-based administration and operations applications:

- 400 MHz processor
- 256 MB memory
- 50 MB disk storage
- 800 x 600-capable display

**Software Requirements**

- OS/390 V2 R8, or later, or z/OS
- The following OS/390 elements, features, and components are required and must be installed, enabled, and configured:
  - IBM HTTP Server for OS/390 (or Domino® Go Webserver)
  - Lightweight Directory Access Protocol (LDAP) Server
  - CICS® Transaction Server; if your application environment uses CICS, then CICS Transaction Server for OS/390 V1R3, or later, is required for CCF or PAA connectivity.
  - IMS™: If your application environment uses IMS, IMS V5R1, or later, is required. If PAA is used, IMS V6R1, or later, is required.
  - Application development and Web site development tools such as the following are optional:
    - WebSphere Application Server (distributed version)
    - VisualAge® for Java™
    - Object Builder
    - WebSphere Studio
  - Workstation software requirements for workstation-based administration and operations applications:
    - Microsoft® Windows/2000
    - Microsoft Windows NT® 4.0 (with server pack 3, or later)
    - Microsoft Windows 95 (with server pack 1 or 2)
    - Microsoft Windows 98

For further details, refer to the publications found at the Web site listed in the Publications section of this announcement.

**Performance Considerations:** WebSphere Application Server V4.0 for z/OS and OS/390 runs on any hardware that supports the OS/390 operating system V2 R8, or later.

Because of changes introduced in SDK 1.3.0, there are significant performance advantages for those applications doing floating point arithmetic if the machine has binary floating point hardware, such as S/390 Parallel Enterprise Server™ — Generation 5, or higher, systems.

Applications currently running on a WebSphere Application Server V3.02 for OS/390 server face performance degradation if moved to a V4.0 server running on a machine without binary floating point hardware. A hardware upgrade is highly recommended before moving these applications to V4.0.

**Planning Information**

**Customer Responsibilities:** Customers who already have V3.02 running in production should review their Web applications to understand whether any code restructuring is required to run in a Java 2 environment. For a set of links containing known incompatibilities between JDK 1.1.8 and SDK 1.3.0, visit the Sun Microsystems Java Web page at:

http://www.javasoft.com

IBM has announced the end of program service for WebSphere Application Server V3.02 for OS/390, effective March 31, 2002. Refer to Software Withdrawal 901-053, dated March 6, 2001.

**Direct Customer Support:** Installation and technical support is provided by IBM Global Services. For more information on services, call 800-IBM-4YOU (426-4968).

**Packaging:** All components are delivered on tape. All publications are delivered via the Web.

**Security, Auditability, and Control**

WebSphere Application Server V4.0 for z/OS and OS/390 provides automated authorization checking and a very strong security implementation for authentication and authorization. It also offers authentication and authorization service to clients, automatically checking security credentials of all clients accessing WebSphere Application Server services.

WebSphere Application Server V4.0 for z/OS and OS/390 continues to derive its security services from the information provided by the hosting IBM HTTP server for OS/390. This is consistent with previous releases of the product. Support for basic or certificate-based authentication and support for SSL is implied by this support.

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**

**New Licensees**

The CSFW configurator stand-alone path is updated to support WebSphere Application Server V4.0 for z/OS and OS/390 for price proposals and new licenses.

WebSphere Application Server V4.0 for z/OS and OS/390 media is only shipped via Customized Offerings (ServerPac, CBPDO, SystemPac®, ProductPac®, and FunctionPac®). CSFW configurator and order entry capability for ServerPac, CBPDO, SystemPac, ProductPac,
and FunctionPac for WebSphere Application Server V4.0 for z/OS and OS/390 will be available beginning March 16, 2001.

**WebSphere Application Server V4.0 for z/OS and OS/390**

WebSphere Application Server V4.0 for z/OS and OS/390 is priced per physical system processor (engine).

**Software Subscription and Support:** The annual price of Software Subscription and Support for WebSphere Application Server V4.0 for z/OS and OS/390 (5655-F81) depends on the number of processor license entitlements purchased.

<table>
<thead>
<tr>
<th>Description</th>
<th>OTC Feature Number</th>
<th>Medium Feature Number</th>
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<tr>
<td><strong>Program Number 5655-F31</strong></td>
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**Upgrades**

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<td>WebSphere Application Server V4.0 for z/OS and OS/390 — Upgrade from WebSphere Application Server V3.02 Enterprise Edition for OS/390 (5655-A98 #0002)</td>
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1 One-time charge

**Basic License:** To order, specify the program number, feature number 9001 for asset registration, and the OTC feature number. Also specify the feature number of the desired distribution medium.

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**Software Subscription and Annual Support:** To order the Software Subscription and Annual Support, specify program number 5655-F81 and the feature number from the table below. The quantity of licenses must be equal to the number of OTC licenses ordered.

<table>
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<th>Description</th>
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<td>WebSphere Application Server V4.0 for z/OS and OS/390</td>
<td>0001 6482</td>
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</table>

**Customization Options:** Select the appropriate feature numbers to customize your order with delivery options desired. These features can be specified on the initial or MES orders.

**Example:** If publications are not desired for the initial order, specify feature number 3470 to ship media only. If, in the future, publication updates are required, order an MES to remove feature number 3480; then, the publications will be shipped with the next release of the program.

<table>
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<th>Description</th>
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<tr>
<td>Serial number only (suppresses shipment of media and documentation)</td>
<td>3444</td>
</tr>
<tr>
<td>Ship media only (suppresses initial shipment of documentation)</td>
<td>3470</td>
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<tr>
<td>Ship documentation only (suppresses initial shipment of media)</td>
<td>3471</td>
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<tr>
<td>Ship media updates only (suppresses update shipment of documentation)</td>
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<tr>
<td>Ship documentation only (suppresses update shipment of media)</td>
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<tr>
<td>Suppress updates (suppresses update shipment of media and documentation)</td>
<td>3482</td>
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</table>

**Customized Offerings**

Most product media is shipped only via customized offerings (for example, CBPDO, ServerPac, SystemPac). Noncustomized items (CDs, diskettes, source media, media kits) will continue to be shipped via the stand-alone product.

**Terms and Conditions**

**Licensing:** IBM International Program License Agreement (IPLA). Proofs of Entitlement (PoE) are required for all authorized use.

These products are licensed under the IPLA, and the associated Agreement for Acquisition of Support, and the Addendum for Support, Z125-6443, which provides for support with ongoing access to releases and versions of the program. These programs have a one-time license charge for use of the program and an ongoing recurring charge for the enhanced support that includes telephone assistance (voice support for defects during normal business hours) as well as access to updates, releases, and versions of the program as long as support is in effect. S390 SupportLine is an option for those customers who desire added services.
**Limited Warranty:** Yes

**Program Services:** Program services will be available until the service end date for the underlying Software Development Kit V1.3, which will be in service until at least September 30, 2002.

**Money-Back Guarantee:** Two-month, money-back guarantee

**Copy and Use on Home/Portable Computer:** No

**Volume Orders (IVO):** No

**Passport Advantage Applies:** No

**Passport Advantage Subscription Applies:** No

**Upgrades:** Customers can acquire upgrades up to the currently authorized level of use of the qualifying programs.

**Support Line:** Yes

**AIX®/UNIX Upgrade Protection Applies:** No

**Entitled Upgrade for Current AIX/UNIX Upgrade Protection Licensees:** No

**AS/400® Software Subscription Applies:** No

**Variable Charges Apply:** No

**Educational Allowance Available:** Yes, 15% education allowance applies to qualified education institution customers.

### Prices

<table>
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### Software Subscription and Annual Support

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### Upgrades

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<tr>
<td>WebSphere Application Server V4.0 for z/OS and OS/390 — Upgrade from WebSphere Application Server V3.02 Enterprise Edition for OS/390 (5655-A98 #0002)</td>
<td>5655-F31</td>
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<tr>
<td>WebSphere Application Server V4.0 for z/OS and OS/390 — Upgrade from WebSphere Application Server V3 Standard Edition for (5655-A98 #0004)</td>
<td>5655-F31</td>
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<td>$17,500</td>
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### Customer Financing:

IBM Global Financing offers attractive financing to credit-qualified commercial and government customers and Business Partners in more than 40 countries. IBM Global Financing is provided by the IBM Credit Corporation in the United States. Offerings, rates, terms, and availability may vary by country. Contact your local IBM Global Financing organization. Country organizations are listed on the Web at:

http://www.financing.ibm.com

### Order Now

Use Priority/Reference Code: LE001

- **Phone:** 800-IBM-CALL
- **Fax:** 800-2IBM-FAX
- **Internet:** ibm_direct@us.ibm.com
- **Mail:** IBM Atlanta Sales Center Dept. LE001 P.O. Box 2690 Atlanta, GA 30301-2690

You can also contact your local IBM Business Partner or IBM representative. To identify them, call 800-IBM-4YOU.

**Note:** Shipments will begin after the planned availability date.

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