IBM WebSphere Application Server Feature Pack for Web 2.0 and Mobile V1.1.0 adds simplified, standards-based development of mobile web applications, rich Ajax websites, and REST web services

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At a glance

The WebSphere® Application Server Feature Pack for Web 2.0 and Mobile V1.1.0 simplifies the addition of Asynchronous JavaScript™ and XML (Ajax) rich desktop and mobile user interfaces and Representational State Transfer (REST) Web services to Java™ Web applications. Web 2.0 capabilities, such as Ajax and REST, help application developers create more connected, interactive applications that result in higher customer satisfaction, user productivity, and enhanced decision making. New mobile Ajax components allow developers to create mobile web applications running on devices such as smartphones and tablets.

New capabilities include:

- Updated IBM® distribution of the Dojo Toolkit 1.6
- A new Dojo-based Diagram component to enable the creation of rich web and mobile applications
- New REST Services including directory listing service, file upload service, graphics conversion service, logging/debug/analytics capture service, and device/browser detection service
- Compliant Java API for RESTful Web Services (JAX-RS) implementation with an IBM supported distribution of Apache Wink

For ordering, contact your IBM representative, an IBM Business Partner, or IBM Americas Call Centers at 800-IBM-CALL (Reference: LE001).

Overview

The WebSphere Application Server family is an innovative, performance-based application foundation for building, deploying, and managing all types of applications, and for ensuring it can deliver on business objectives, regardless of the situation. WebSphere Application Server has three foundational attributes that can enable robust and agile business applications:

- Efficient development and management
- Highly effective performance
- Application innovation
WebSphere Application Server Feature Pack for Web 2.0 and Mobile V1.1.0 promotes these efficient development and application innovation attributes. Efficient development happens through the simplified extension of existing and new WebSphere Application Server applications with Web 2.0 and mobile capabilities. Application innovation is achieved through extended application scenarios made possible by more connected, more productive, and more mobile applications.

Version 1.1.0 highlights include:

- IBM distribution of the IBM Dojo Toolkit 1.6 for building rich user experiences with Ajax and mobile web. This includes new widgets, new skins for mobile platforms, and a list of client-side services intended to improve user experience.
- New mobile and rich Internet application (RIA) building blocks, including directory listing service, file upload service, graphics conversion service, logging/debug/analytics capture service, and device/browser detection service.
- A new Dojo-based diagram component is available to enable the creation of rich web and mobile applications with needs to display networks, processes, and any other types of diagrams.

The WebSphere Application Server Feature Pack for Web 2.0 and Mobile V1.1.0 is an optional product extension for:

- WebSphere Application Server V6.1, V7.0, and V8.0
- WebSphere Application Server Community Edition V2.0 and V2.1
- WebSphere Application Server Hypervisor™ Edition

**Key prerequisites**

One or more of the following:

- WebSphere Application Server V6.1, V7, or V8
- WebSphere Application Server Network Deployment V6.1, V7, or V8
- WebSphere Application Server for z/OS® V6.1, V7, or V8
- WebSphere Application Server Express V6.1, V7, or V8
- WebSphere Application Server for Developers V6.1, V7, or V8
- WebSphere Application Server Community Edition V2.0 or V2.1
- WebSphere Application Server Hypervisor Edition

**Planned availability date**

June 17, 2011: Electronic distribution

**Description**

The WebSphere Application Server Feature Pack for Web 2.0 and Mobile V1.1.0 provides essential components to extend service-oriented architecture (SOA) by connecting web services, SOA services, and Java Enterprise Edition (Java EE) objects into interactive desktop-web and mobile web user interfaces. A particular emphasis is made on user experience through an extensive list of GUI components that can be used either for desktop or mobile web applications. It also provides a standards-based programming model for application developers to build RESTful web services using their existing Java platform investment. Mobile device operating system support includes iOS 3 and 4; Android 2.1, 2.2, and 3.0; and BlackBerry 6 Bundle 695. Associated mobile browser support includes Safari 3.1+ and 4.2+ for iOS. For Android and BlackBerry OS, the default Webkit-based browser that comes with the OS is supported. For example, Android 2.1 OS comes with Webkit 2.1.
IBM Dojo Toolkit

This Feature Pack distributes and supports the Dojo Toolkit 1.6, a JavaScript toolkit to enable the rapid creation of Ajax-based desktop and mobile web interfaces.

IBM Dojo Diagrammer

This feature pack comes with ILOG® Dojo Diagrammer, a new widget with advanced diagramming and graph layout capabilities built on top of the open source Dojo Toolkit. The purpose of Dojo Diagrammer is to provide a solution for Ajax applications to display graphs, or networks, of nodes connected by links. The diagramming component includes sophisticated graph layout algorithms that can be run through a server-side REST service or locally on the client using JavaScript algorithms.

RESTful web services

Driven by developer needs for simplicity and Web 2.0 style application requirements, RESTful web services are a popular alternative for exposing business logic in web applications. REST is an architectural style that uses multiple standard technologies like HTTP, XML, ATOM, and HTML. REST is used to define flexible applications based on the notion of resources. A resource is simply any data that you want to share on the web that you can identify by a Uniform Resource Identifier (URI).

Apache Wink

Apache Wink is an open source software project hosted by the Apache Software Foundation that provides an implementation of JAX-RS. In addition, Apache Wink provides key capabilities to enable common application development needs beyond that which is defined in the JAX-RS standard. The IBM distribution of Apache Wink includes JAX-RS 1.1 server runtime.

For more information on the WebSphere Application Server Feature Pack for Web 2.0 and Mobile, visit

http://www.ibm.com/websphere/was/web20

How to obtain

To download WebSphere Application Server feature packs, visit

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

Your support authorization for any of the following authorizes feature pack support:

- WebSphere Application Server V7.0 and V8.0
- WebSphere Application Server Hypervisor Edition V7.0 and V8.0
- WebSphere Application Server Network Deployment V7.0
- WebSphere Application Server for z/OS V7.0 and V8.0
- WebSphere Application Server - Express V7.0 and V8.0
- WebSphere Application Server for Developers V7.0 and V8.0

Product positioning

With WebSphere Application Server Web 2.0 and Mobile Feature Pack, enterprises are now able to reach out to their customers, partners, and employees wherever they are, through their mobile devices. The web applications developed initially for desktop browsers can now be adapted and deployed to mobile devices such as smartphones and tablets. The Web 2.0 and Mobile Feature Pack minimizes IT costs: it leverages existing back-end services developed on WebSphere Application Server, and adds mobile-specific front-end capabilities based on the Dojo toolkit.
The WebSphere Application Server Web 2.0 and Mobile Feature Pack introduces new components, features, and tooling to create mobile-ready versions of existing web applications. It addresses the following challenges faced by project teams who need to extend desktop web applications to mobile devices:

- Reuse of existing enterprise infrastructure: As a natural extension to Websphere Application Server, the feature pack leverages back-end core capabilities through RESTful services, enabling easy connectivity between mobile clients and existing server-side components.
- Leverage existing skills: Ajax developers reuse their desktop-browser experience. No need to learn mobile-specific or device-specific programming languages.
- Minimize redesign of applications: Regular desktop web applications are poorly displayed on mobile devices and are barely usable. The feature pack provides standard-based technology to create mobile web content. This is based on the distribution of the Dojo Toolkit and REST APIs, offering a large collection of core services and user interface widgets.
- Create mobile-friendly content: Resulting websites can be used across different mobile platforms, with almost native look and feel. Style sheets for smartphones are available to deliver a user experience compatible with both mobile device capabilities and the user's expectation.
- Mobile device operating system (OS) support includes iOS 3 and 4; Android 2.1, 2.2, and 3.0; and BlackBerry 6 Bundle 695. Associated mobile browser support includes Safari 3.1+ and 4.2+ for iOS. For Android and BlackBerry OS, the default Webkit-based browser that comes with the OS is supported.

**Offering/solution highlights**

WebSphere Application Server is the leading open standards-based application foundation, offering accelerated delivery of innovative applications and unmatched operational efficiency, reliability, administration, security, and control.

WebSphere Application Server V8.0 offers a choice for businesses that need an agile, solid foundation to lower the total cost of ownership (TCO) and support the innovation and reuse of applications for their SOA. WebSphere Application Server delivers industry leadership performance and reliability, availability, serviceability, and scalability to support their mission-critical applications.

With a variety of configuration and flexible pricing options, WebSphere Application Server V8.0 can offer a solution for small and large enterprises alike. WebSphere Application Server V8.0 configurations include:

- WebSphere Application Server - Express
- WebSphere Application Server
- WebSphere Application Server for Developers
- WebSphere Application Server Network Deployment
- WebSphere Application Server for z/OS

Additionally, WebSphere Application Server for Developers is also available at no charge, with optional paid support, in order to lower the barrier to entry and help developers confidently build applications that can run unchanged on WebSphere Application Server production environments.

WebSphere Application Server configuration options deliver a rich application deployment environment with application services that include enhanced capabilities for the entire WebSphere family of products.

These configuration options offer:

- Flexible pricing options to better align with business needs and a project's stage within the development life cycle
- The flexibility to scale and grow, as business needs evolve, without the cost of rearchitecting, reprogramming, and migrating to different technology bases
• Support for a broad set of open standards-based programming models, including Java EE 6, OSGi Applications, Web 2.0 and Mobile, Java Batch, XML, Dynamic Scripting, Service Component Architecture (SCA), Communications Enabled Applications (CEA), and Session Initiation Protocol (SIP)
• Proven transactional integrity, reliability, security, and increasing levels of administrative control
• Support for Java Platform, Standard Edition 6.0, including the latest performance, security, and reliability enhancements delivered by the IBM Java SDK 6.0 (J9 2.6) to accelerate Java application innovation
• Tight integration with the separately licensed IBM Rational® Application Developer for WebSphere Software and IBM Rational Application Developer Standard Edition for WebSphere Software to help deliver higher quality, departmental to mission-critical applications for WebSphere Application Server.

**Offering/solution positioning**

The WebSphere Application Server family offers multiple configuration options and support for multiple business models and deployment platforms. It also supports a wide range of scenarios, from open source-based projects and projects with no up-front budget, to simple administration of a single server environment, to a clustered, highly available, high-volume environment with edge-of-network services.

WebSphere Application Server V8.0 configurations are built on a common server foundation that delivers the same Java EE 6 and broad programming model support, and proven transactional engine, with increasingly higher qualities of service available across product configurations. This offers unparalleled flexibility to incrementally add higher quality of service to applications as business needs change without the cost of rearchitecting, reprogramming, or migrating to different technology bases.

Configuration options include:

• **WebSphere Application Server - Express V8.0**: An affordable, ready-to-go application foundation for single server, smaller scale deployments of dynamic web applications that can be effortlessly migrated to more advanced versions of the WebSphere Application Server family as business needs change. WebSphere Application Server - Express is limited to single-server implementations and up to a maximum of 480 Processor Value Units per server or virtualized partition.

• **WebSphere Application Server for Developers V8.0**: This is the optimal development environment for building and testing applications on a developer’s desktop that will eventually run on WebSphere Application Server in production. Licensed for development use, WebSphere Application Server for Developers offers functional equivalence to the core WebSphere Application Server configuration to help developers reduce testing effort, develop with confidence, and deliver innovative applications faster. This configuration is also available at no charge, with optional paid support, in order to lower the barrier to entry for developers building for WebSphere Application Server environments.

• **WebSphere Application Server V8.0**: An application foundation tailored for single-server to moderately sized configurations of departmental or large-scale dynamic web applications requiring web tier clustering and limited failover capabilities, and flexible pricing alternatives, including socket-based pricing.

• **WebSphere Application Server Network Deployment V8.0**: For enterprises that need near-continuous availability, advanced management, and automated performance optimization for their mission-critical applications, WebSphere Application Server Network Deployment delivers an environment that is highly available, dynamically scalable, and easily managed. Building on the core WebSphere Application Server configuration, WebSphere Application Server Network Deployment offers:
  - World-class clustering and high availability management to help eliminate the cost of system downtime
  - Edge components, which offer sophisticated load balancing, caching, and centralized security for enhanced performance at the edge of the network
- Advanced centralized management and administration to make management of more complex environments less time-consuming and resource-consuming
- Enterprise-proven leading security capabilities to safeguard your business
- Industry-leading performance that maximizes business competitiveness while minimizing TCO

- WebSphere Application Server for z/OS, V8.0: An application foundation optimized to take advantage of the unique qualities of service of IBM System z® hardware and the z/OS operating system. WebSphere Application Server for z/OS offers functional equivalence to WebSphere Application Server Network Deployment, along with additional capabilities such as prioritized workload management, advanced transactional integrity, intense scalability, and data and workload collocation, made possible through tight integration with IBM System z and z/OS.

Related products

WebSphere Application Server Hypervisor Edition V7.0

WebSphere Application Server Hypervisor Edition includes all the robust features of WebSphere Application Server and is optimized to run in server virtualized environments. Designed to reduce installation and configuration time, WebSphere Application Server Hypervisor Edition helps reduce time-to-value during development, test, and production of WebSphere based applications. Each WebSphere Application Server Hypervisor Edition offering is a preconfigured package that integrates WebSphere Application Server and associated feature packs, IBM HTTP Server, and an operating system compatible with each supported hypervisor. Enhanced operational cost reduction and business agility can be gained through the use of WebSphere Application Server Hypervisor Edition with IBM Workload Deployer, a cloud computing appliance that manages IBM products in a cloud environment. It dispenses patterns of virtual images into a pool of virtualized resources running a supported hypervisor. The optimization for deployment speed and agility enables an entirely new usage paradigm for WebSphere Application Server built around rapid setup and teardown. Test cases can be based upon a standardized deployment that is destroyed and reinstalled after each execution.

WebSphere Application Server Community Edition V2.1

WebSphere Application Server Community Edition V2.1 delivers a lightweight Java EE application server built on open source Apache Geronimo technology. It is backed by optionally available, world-class support from IBM, ensuring that customers receive assistance and timely problem resolution from IBM's team of expert support professionals and developers. Simple socket-based pricing is also optionally available.

WebSphere Application Server Feature Pack for Dynamic Scripting V1.0

Speed the development and delivery of situational applications using dynamic scripting languages. Key capabilities include:

- Utilize the PHP and Groovy dynamic scripting languages to quickly address application requirements
- Leverage Web 2.0 technologies, such as Asynchronous JavaScript and XML (AJAX), representational state transfer (REST), Atom, JavaScript object notation (JSON), and Really Simple Syndication (RSS) to unleash and reuse enterprise content
- Develop and deploy application components supporting the iWidget specification that can be incorporated into WebSphere Portal and IBM Mashup Center-based applications
- Run WebSphere sMash V1.1.1 applications unchanged in a WebSphere Application Server deployment
- Provide community-supported browser-based tooling and an Eclipse plug-in for application developers, available at no charge on the Project Zero community website
• Allow community-supported, centralized management and deployment -- sMash Enterprise Packager -- available on the Project Zero community website
• Supports WebSphere Application Server V8.0, V7.0, and V6.1 on hardware and software configurations listed at http://www.ibm.com/software/webservers/appserv/was/featurepacks/dynamicscripting/reqs/index.html

IBM Rational Application Developer for WebSphere Software and IBM Rational Application Developer Standard Edition for WebSphere Software

IBM Rational Application Developer for WebSphere Software and IBM Rational Application Developer Standard Edition for WebSphere Software provide a complete environment for Java, Java EE, web, web services, SOA, OSGi, and portal designers and developers. The tools can be used for any Java, Java EE-compliant server, but they are optimized to target IBM WebSphere runtimes, including WebSphere Application Server and WebSphere Portal Server. The solution is aligned with the latest releases of WebSphere Application Server V8.0 for a unified development and runtime environment.

IBM Rational Application Developer for WebSphere Software accelerates development and unit test to ensure delivery of higher-quality applications and offers proven tools for teams leveraging emerging technologies of Web 2.0, agile, SOA, OSGi, and cloud computing, which help to accelerate adoption and software delivery. IBM Rational Application Developer for WebSphere Software empowers novice to senior developers to quickly build high-quality and easily maintainable applications. Developers can put their time, energy, and creativity into delivering innovative business solutions in a shorter amount of time with automation of routine coding tasks and graphical construction tools.

The latest release enables organizations to:

Increase development team productivity

• Enhanced agile and iterative development support
  – Focus on creation, validation, refactoring, and modification of artifacts
  – Exploit the annotation-based programming model style
  – Benefit from new and emerging programming model support
    -- JEE6 support (EJB 3.1, JPA 2.0, JSF 2.0, Servlet 3.0)
    -- Open SCA development
    -- OSGi Application development tools
    -- Built on Eclipse 3.6, JRE 1.6

• Simplified development of Web 2.0-style rich Internet applications with support for Ajax, Dojo, and REST services

Improve application quality (not included in IBM Rational Application Developer Standard Edition for WebSphere Software V8.0)

• Line level code coverage, advanced code review, and debug tools
• Static problem determination tools (line level code coverage enhancements)
• Dynamic problem determination tools: Debug tools for Java EE 6, enhanced profiling
• Collaborative debugging environment through integration with IBM Rational Team Concert™ to enable teams to share live debug sessions between team members

Optimize an existing IBM product investment

• WebSphere Application Server test environment for V8.0, V7.0, V6.1, and V6.0 (remote deploy support)
• WebSphere feature pack support
• WebSphere Portal development
• Enterprise Information Systems (not included in IBM Rational Application Developer Standard Edition for WebSphere Software)
  – WebSphere adapter support (SAP, PeopleSoft, Siebel, Oracle E-Business Suite, and JD Edwards)
  – CICS® and IMS™ support

Establish cloud computing infrastructure

• Access WebSphere Application Server test environments in the IBM Software Delivery Services cloud

WebSphere Adapters V7.5

WebSphere Adapters help accelerate business integration projects with rapidly deployable, enterprise-ready connections based on best practices. The WebSphere Adapters portfolio provides a comprehensive set of capabilities to reuse and extend your packaged and legacy applications. WebSphere Adapters V7.5 includes enhanced adapters for SAP Software, Siebel Business Applications, Oracle E-Business Suite, JD Edwards EnterpriseOne, and PeopleSoft Enterprise.

The Adapter for Oracle EBS is been enhanced to provide support for additional interfaces namely: XML gateway using JMS and Oracle Advanced Queue, thus providing a consistent approach for accessing/storing information in Oracle E-Business Suite. The Adapters for SAP and Siebel have been enhanced for additional data type support.

A separate license entitlement for the appropriate WebSphere Adapter must be purchased when deploying WebSphere Adapter components for SAP, Oracle EBS, Siebel, PeopleSoft, or JD Edwards to WebSphere Application Server V8.0 or WebSphere Application Server V7.0 for production use.

Reference information

• For information on WebSphere Application Server V8.0, refer to Software Announcement 211-139, dated April 05, 2011.
• For information on WebSphere Application Server for z/OS, V8.0, refer to Software Announcement 211-117, dated April 05, 2011.
• For information on WebSphere Application Server V7.0, refer to Software Announcement 208-266, dated September 09, 2008.
• For information on WebSphere Application Server for z/OS V7.0, refer to Software Announcement 208-208, dated September 09, 2008.
• For information on WebSphere Application Server Community Edition V2.1, refer to Software Announcement 208-254, dated July 29, 2008.
• For information on WebSphere Application Server Hypervisor Edition for AIX®, refer to Software Announcement 209-388, dated November 17, 2009.

Offering Information

Product information is available via the Offering Information website

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

Also, visit the Passport Advantage® website

http://www.ibm.com/software/passportadvantage
Publications

For WebSphere Application Server Feature Pack product documentation, visit

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

Product documentation will be available at product availability.

Technical information

Specified operating environment

Hardware requirements
For detailed system requirements for all editions of WebSphere Application Server, visit

http://www.ibm.com/support/docview.wss?rs=180&uid=swg27006921

For detailed system requirements for WebSphere Application Server Community Edition, visit

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

For detailed system requirements for WebSphere Application Server Hypervisor, visit

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

Software requirements
For detailed system requirements for all editions of WebSphere Application Server, visit

http://www.ibm.com/support/docview.wss?rs=180&uid=swg27006921

For detailed system requirements for WebSphere Application Server Community Edition, visit

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

For detailed system requirements for WebSphere Application Server Hypervisor, visit

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

Alternatively, system requirements can be found in the announcement letters in the Reference information section.

The program's specifications and specified operating environment information may be found in documentation accompanying the program, if available, such as a readme file, or other information published by IBM, such as an announcement letter. Documentation and other program content may be supplied only in the English language.

Limitations

For additional information, refer to the Usage restrictions topic in the Terms and conditions section of this announcement, or to the License Information document that is available on the IBM Software License Agreement website

Security, auditability, and control

Uses the security and auditability features of the host hardware or software. The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Software Services

IBM Software Services has the breadth, depth, and reach to manage your services needs. You can leverage the deep technical skills of our lab-based, software services team and the business consulting, project management, and infrastructure expertise of our IBM Global Services team. Also, we extend our IBM Software Services reach through IBM Business Partners to provide an extensive portfolio of capabilities. Together, we provide the global reach, intellectual capital, industry insight, and technology leadership to support a wide range of critical business needs.

To learn more about IBM Software Services or to contact a Software Services sales specialist, visit

http://www.ibm.com/software/sw-services/

Ordering information

The ordering information is unaffected by this announcement.

Charge metric

The charge metrics are unchanged by this announcement.

Passport Advantage

No new media packs.

Customized Offerings

Product deliverables are shipped only via CBPDO, ServerPac, and SystemPac®.

CBPDO and ServerPac are offered for Internet delivery in countries where ShopzSeries product ordering is available. Internet delivery reduces software delivery time and allows you to install software without the need to handle tapes. For more details on Internet delivery, refer to the ShopzSeries help information at

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

You choose the delivery method when you order the software. IBM recommends Internet delivery. In addition to Internet and DVD, the supported tape delivery options for CBPDO, ServerPac, and SystemPac include:

- 3590
- 3592

Most products can be ordered in ServerPac and SystemPac the month following their availability on CBPDO. z/OS can be ordered via all three offerings at general availability. Production of software product orders will begin on the planned general availability date.

- CBPDO shipments will begin one week after general availability.
- ServerPac shipments will begin two weeks after general availability.
• SystemPac shipments will begin four weeks after general availability due to additional customization and data input verification.

Terms and conditions

IBM has tested sample applications created with the program to determine if they will execute properly in the browser on mobile operating system platforms from Apple (iOS), RIM (Blackberry), and Google (Android) (collectively "Mobile OS Platforms"). Nevertheless, these Mobile OS Platforms are provided by third parties, are not under IBM's control, and are subject to change without notice to IBM. While IBM documentation or other materials may refer to the Mobile OS Platforms, note that the specifications for the program exclude any commitments that, and IBM makes no warranties that, any output created using the program (including, but not limited to, applications) will execute properly on, interoperate with, or be compatible with the Mobile OS Platforms or any other third-party hardware or software.

Prices

For additional information and current prices, contact your local IBM representative.

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To order, contact the Americas Call Centers or your local IBM representative, or your IBM Business Partner.

To identify your local IBM representative or IBM Business Partner, call 800-IBM-4YOU (426-4968).

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The Americas Call Centers, our national direct marketing organization, can add your name to the mailing list for catalogs of IBM products.

Note: Shipments will begin after the planned availability date.

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