

WebSphere Application Server for z/OS
To support your business objectives



WebSphere® software



Combine the availability and scalability of System z with the business flexibility of WebSphere Application Server.



Your business can only be as flexible as the IT systems that support it. To survive and thrive in an environment of market volatility and intense competition, you need an IT infrastructure that can cope with constant change. Your IT infrastructure must be flexible enough to respond quickly, cost-effectively and with minimal disruption to the business operations and activities it supports.



Service oriented architecture

In IBM WebSphere® Application Server, you have a foundation for a service oriented architecture (SOA) that is flexible and secure enough to address your challenges. SOA, a business-driven architectural approach, helps to integrate the applications behind business processes as linked and repeatable business tasks and services. WebSphere Application Server can help you to:

- *Build and deploy application services quickly and easily.*
- *Run services in the most secure, scalable, highly available environment.*
- *Reuse software assets, and extend their reach.*
- *Manage applications effortlessly.*
- *Grow as needs evolve, leveraging core assets and skills.*
- *Reduce the complexity of the IT infrastructure.*
- *Improve business processes to become more responsive to customers, suppliers and partners.*
- *Align business and IT.*

WebSphere Application Server for z/OS

The combination of IBM WebSphere Application Server for z/OS, Version 6.1 and the IBM System z™ platform provides unique value in today's challenging and complex operating environments.

WebSphere Application Server for z/OS is a sophisticated Java™ 2 Platform, Enterprise Edition (J2EE) application server that provides a scalable, cost-effective and security-rich deployment environment for your SOA. WebSphere Application Server for z/OS is a proven and strategic platform for the mainframe.



In WebSphere Application Server, you have a foundation for a service oriented architecture.

IBM WebSphere Application Server for z/OS combines the features of WebSphere Application Server with the reliability and availability of IBM System z mainframe products. It provides the qualities of service of the WebSphere Application Server platform, such as close proximity to data, intense scalability and rich security. It integrates with the System z portfolio of hardware and IBM z/OS® software assets, and it provides significant single-tier value, including:

- *Reduced transaction latency related to network transmission and network formatting.*
- *High-speed and efficient native z/OS interfaces, including shared memory areas.*
- *Reduced interactions between resources in two-phase commit coordination.*
- *Faster memory-to-memory transfer rates with databases (Type 2 connections).*
- *Operating efficiencies from the proximity of business logic and z/OS data.*



WebSphere Application Server for z/OS running on the System z platform allows you to reduce your costs in establishing a high-performance, high-reliability infrastructure for your critical applications. Using z/OS allows you to use IBM Parallel Sysplex® technology to cluster multiple operating systems and hardware images into a single, logical operating system.

Reducing the number of physical tiers allows you to reduce your overall management costs. It can help you to reduce your requirements for support staff and the variety of skills they need. The potential physical-server footprint reductions can provide significant savings in floor-space, electrical and facility requirements.

Improve and speed development

In addition to providing support for J2EE, WebSphere Application Server for z/OS also supports Java 2 Platform, Standard Edition (J2SE). These development platforms help you to simplify and integrate your applications by:

- *Eliminating the need to write custom code, and enabling development, testing and deployment of more-demanding business applications with less time and effort.*
- *Simplifying enterprise applications by basing them on standardized, modular components.*
- *Providing connectors and Java Message Service (JMS) support.*
- *Improving portability across other Java Development Kit (JDK) platform.*



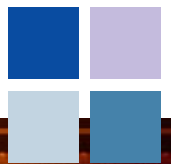
The entire WebSphere Application Server family of products is built on a common Java programming model and delivers a range of programming-model extensions that can help improve development-cycle times.

Increase interoperability

When your IT assets are integrated, your organization benefits from the ability to reuse assets, improve efficiency and connect business and IT throughout the enterprise. WebSphere Application Server for z/OS simplifies integration with rich features that accelerate the adoption of SOA by rendering existing IT assets as service components, encouraging reuse and efficiency.

- Web Services Interoperability Basic Security Profile *allows Web-services applications to be developed and configured with the assurance of interoperable security among different vendors.*
- Web Services Notification *provides a publish-subscribe programming model for Web-services applications to help you align Java and non-Java environments. Web Services Notification (WS-N) helps standardize the way Web services interact using notifications or events.*
- Web Services Business Activity *is a programming framework that supports transaction compensation. It allows loose coupling of transactions across trust boundaries, avoiding the need to hold database locks between enterprises. It triggers compensation for previously committed transactions if the wider scope of work encounters a failure.*
- Java Specification Report (JSR) 168 portlet container *has been integrated into WebSphere Application Server for z/OS, providing a common programming model for presentation logic across the WebSphere stack. All presentation logic can now be written as portlets. As a result, you can make use of the richer presentation support and full aggregation capabilities of WebSphere Portal Server without rewriting applications.*
- WebSphere automation toolkit *is an Eclipse-based, full-function development environment for wsadmin scripts. These scripts include Jython editor, color-coded keyword highlighting, statement-completion assistance, script-debugging support and extensive support for use of Jython script libraries and code snippets.*
- Console command assistant *is a new feature of the WebSphere administrative console that displays the wsadmin command that is equivalent to the action taken by the user interacting with the console. The output can be transferred directly to the WebSphere automation toolkit, making development of Jython scripts based on console actions easier. The command assistant output can also be saved in a plain text file for later use.*

Reuse assets, improve efficiency and connect business and IT throughout the enterprise.



Support next-generation communications

Applications are growing rapidly, from telecoms and wireless providers, call centers, pervasive computing, and customer relationship management (CRM).

WebSphere Application Server for z/OS supports JSR 116 Session Initiation Protocol (SIP) servlets. SIP servlets are used to establish, modify and terminate multimedia IP sessions, including IP audio and video, instant messaging, application sharing and electronic whiteboards. Basic tooling for creation of portlets and SIP applications is provided in the WebSphere Application Server Toolkit, which is part of the WebSphere Application Server delivery.

Simplify administration

WebSphere Application Server for z/OS provides a number of features that help to simplify administration. These include:

- *Simplified automation scripting through additional administrative commands.*
 - *Simplified key user scenarios through guided activities and panel refactoring.*
 - *Improved procedure for cluster creation, and high availability and management of cluster members.*
 - *Enhanced views for links and mappings of servers, applications and resources.*
 - *Improved application-deployment experience and time to deploy fine-grained administrative isolation and authorization.*
- *Lightweight administration-client package that allows users to install the administration client and scripts on a remote machine with a small on-disk footprint.*
 - *Packaged as a Java archive (JAR) file or an Open Service Gateway initiative (OSGi) bundle.*
 - *Configuration of shared libraries during application installation.*
 - *Incremental cell upgrade.*
 - *Ability to create new v6 nodes after the deployment manager has been upgraded.*
 - *Ability to create v5 and v6 servers.*
 - *Support for v6 and v5 nodes in the same cell.*
 - *Number of tasks reduced by more than 50 percent.*
 - *Installation of a cell-level environment.*
 - *Installation and configuration of IBM HTTP Server and the Web server plug-in.*
 - *Configuration of administrative security out of the box.*
 - *Secure Sockets Layer (SSL) communications with self-signed certificates.*
 - *Configuration of data sources using a new wizard.*
 - *Installation of applications using a new fast-path selection.*
 - *Creation and debugging of scripts using a new Jython editor and the console command assistant.*

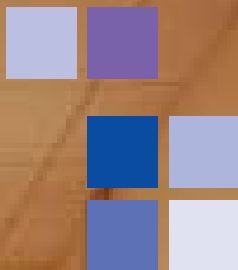
A foundation for success

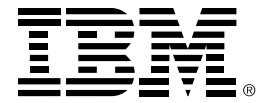
In WebSphere Application Server for z/OS, you have a foundation for your SOA that is flexible and secure. Building on this robust platform, you can integrate your current investments and use existing skills as a critical part of your SOA strategy.

For more information

To learn more about IBM WebSphere Application Server for z/OS, contact your IBM representative or IBM Business Partner, or visit:

ibm.com/software/webservers/appserv/was





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