

WebSphere. software

IBM WebSphere Host Publisher for AIX, Windows NT, Windows 2000 and Sun Solaris, Version 4.0

Highlights

- Extends existing host applications to Web browsers
- Integrates new WebSphere software applictions with current host applications
- Consolidates multiple host data sources for delivery as custom HTML or XML to Java applications
- Provides access to traditional host systems such as 3270, 5250, VT52, VT100 and VT220, as well as Java technology-based classes and JDBC-enabled databases

- Supports EJB host access
- Exploits WebSphere Application Server, Advanced Edition
- Allows J2EE technologycompliant Web application development and deployment
- Leverages legacy content as new enterprise portal content with WebSphere Portal Server portlet
- Enables existing legacy services to quickly and easily be deployed as new Web services

Successful e-businesses need to provide Web access to host information. Web-to-host integration is one of the fastest ways to extend existing business-critical applications to your employees, trading partners and customers.

With IBM WebSphere® Host Publisher, you can provide important information directly to users, reduce the expense of call centers and improve customer service. Simply build and deploy Web self-service applications to provide host access to almost any user with a standard Web browser.

WebSphere Host Publisher provides a quick and easy way to implement e-business applications by integrating existing applications with new WebSphere applications and extending legacy applications to Web browser users.



WebSphere Host Publisher lets you merge two or more applications into a single Web page, which can then be extended into a consolidated portal page.

A key component of the IBM WebSphere Host Integration Solution, WebSphere Host Publisher allows you to integrate multiple sources of data—including host and database applications—as a single Web page, with no change to back-end systems. It provides the high level of security you need for your Web-based environment, offering support for Secure Sockets Layer (SSL) encryption and authentication, as well as Data Encryption Standard (DES)-encrypted passwords. And through support of WebSphere Application Server, Advanced Edition workload management capabilities, WebSphere Host Publisher provides load balancing and failover so that large enterprises can maximize WebSphere Host Publisher performance, throughput and reliability.

WebSphere Host Publisher consists of two major components: IBM WebSphere Host Publisher Studio and IBM WebSphere Host Publisher Server. WebSphere Host Publisher Studio provides an easy-to-use customization

environment to create Integration

Objects—reusable beans for Java™

technology-based applications—that
can be used to dynamically access
back-end data sources. WebSphere
Host Publisher Server provides the
runtime environment to execute
Integration Objects created with
WebSphere Host Publisher Studio.

WebSphere Host Publisher Studio

WebSphere Host Publisher Studio automatically generates Integration Objects, which encapsulate interactions and data retrieval. Integration Objects are used in fully customizable HTML pages and can be reused by other Java application programs created outside WebSphere Host Publisher.

WebSphere Host Publisher Studio generates fully customizable HTML output with embedded JavaServer Pages (JSP) tags. Point-and-click features allow Web administrators to map specific fields on a Web page using the HTML tags to point to specific fields on the host emulation screen or database table. This interactive implementation allows information to be updated from the Web interface, making it simple to connect users to back-end systems across the enterprise.

You can also enhance the generated HTML with your favorite Web-authoring tool, such as IBM WebSphere Studio, to meet your particular style and image requirements. This Web-authoring tool from WebSphere software provides all the tools needed for WebSphere Host Publisher e-business implementation, such as HTML or JSP tag editing, new business logic creation and site deployment enhancements.

WebSphere Host Publisher Studio runs on Microsoft® Windows NT®, Windows® 2000, Windows 98, Windows XP and Windows Me.

WebSphere Host Publisher Server

WebSphere Host Publisher Server integrates with IBM WebSphere Application Server, Advanced Edition and provides other runtime components, such as connection management, license monitoring, runtime administration and log and trace management.

WebSphere Host Publisher Server offers enterprise-class performance, scalability and availability through several key features, such as object chaining, connection pooling, load balancing and failover support. Object chaining can improve performance and flexibility by breaking complex tasks into manageable subtasks. These reusable objects can be chained to provide the most efficient flow through a complex application or used by other applications requiring the same subtask. Connection pools, which are defined in WebSphere Host Publisher Studio, can eliminate the overhead of establishing, connecting and disconnecting separate connections for each host request. Load balancing can enable users to control client request loads across multiple WebSphere Host Publisher servers, while failover support can give you the capability to detect a failed server and direct traffic around it.

Using WebSphere Application Server and WebSphere Host Publisher, you can integrate applications with IBM connector solutions, such as IBM MQSeries® integration software, to expand the reach to legacy applications. You can also use WebSphere software and your favorite Java technology-based integrated development environment (IDE)—WebSphere Studio family, for example—to add new business logic to WebSphere Host Publisher implementations.

WebSphere Host Publisher Server runs on IBM AIX®, Windows NT, Windows 2000 and Sun Solaris operating environments. Applications created with WebSphere Host Publisher Studio can run without modification in most environments.

Start simple

WebSphere Host Publisher can help your business reduce costs and minimize the complexity associated with exploiting Internet technologies. Create new composite applications that mine information from various data sources—without modifying your back-end systems. Integration of back-end systems is performed on

WebSphere Host Publisher Studio. The information is then delivered to the Web browser user through standard HTML. Easy-to-use GUIs, like wizards, can allow Web designers to create and manage new composite applications. These applications combine multiple back-end data sources to form a Web page. Task-oriented prompts guide the designer through the creation process—recording host and database interactions, identifying desired data and labeling selected data for retrieval. When the Web page is completed, it is published to WebSphere Host Publisher Server.

Provide flexibility

This open, industry-standard software from WebSphere software supports applications running on traditional host systems, such as 3270, 5250 and virtual terminal (VT). WebSphere Host Publisher also connects to Java technology-based applications and databases with Java Database Connectivity (JDBC) interfaces, such as IBM DB2[®] Universal Database[™] and databases from Oracle and Sybase.

With Extensible Markup Language (XML) support, WebSphere Host Publisher provides access to existing 3270 and 5250 applications in an XML format to use within new e-business applications. In addition, the HTML mapper capability provides a loadand-go HTML entry-level emulator for 3270 or 5250 application access. Without customization, existing 3270 and 5250 applications can be extended as HTML to Web users. This capability is targeted to users who need periodic access to the host application and do not have workstations enabled for Java technology-based applications.

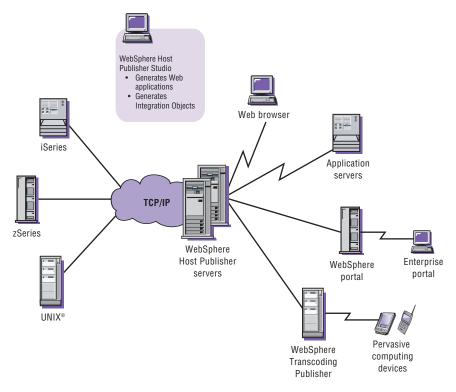
WebSphere Host Publisher can be integrated with IBM WebSphere Transcoding Publisher to extend the reach of host data and application beyond the Web to pervasive computing technologies. You can deliver host applications and data directly to pervasive computing devices, such as mobile phones and personal digital assistants (PDAs).

Scale with confidence

Scalability, high availability and reliability—combined with support for a wide range of back-end applications—make WebSphere Host Publisher an easy, cost-effective way to extend your business-critical applications to the Web.

Through multiplatform runtime support on several operating environments, your WebSphere Host Publisher applications can be deployed on the systems that best meet your performance needs.

WebSphere Host Publisher provides full support of the WebSphere Application Server workload management features, such as cloning and load balancing. This support can provide improved throughput because requests can be distributed across multiple Java virtual machines (JVMs). It also provides fault tolerance because if one JVM fails, a user request can be processed by one of the remaining clones.



Supported host applications

- 3270
- 5250
- VTJDBC

Web-to-host security

- Web security technology enabled on Internet links
- Existing application security leveraged in data center

Scalability

- Cloning
- · Load balancing
- Failover

Enterprise portals

As critical business functions move to the Web, a portal infrastructure that can handle the diverse needs of your employees, customers and trading partners is paramount. WebSphere Portal family solutions provide a personalized, single point of access to all necessary information resources, which reduces information overload, accelerates productivity and increases Web site usage.

Some of the most important enterprise information resources are the 3270 and 5250 legacy information systems that drive today's businesses. The WebSphere Host Publisher portlet can enable legacy content and services to be extended as new portal content quickly and easily, allowing you to incorporate large inventories of legacy application content within the personalized single point of access. The portlet also delivers the advanced management capabilities needed to enable complex interaction with existing legacy applications, helping to make it easier to navigate within a system.

Grow fast

The need to expand your business applications with new capabilities is seen in the emerging e-business marketplace. With WebSphere Host Publisher, you can have the ability to reuse, expand and compound your initial investment in WebSphere Host Publisher Integration Objects in new business applications that can grow with the needs of your company.

Use WebSphere Host Publisher as an application development tool or bean generator to help reduce cost and accelerate time to market for new WebSphere application development projects. WebSphere Host Publisher can generate JavaBeans modules you need for legacy access by new WebSphere applications, helping reduce the programming effort and mask the complexity of host access from WebSphere application developers.

As your needs evolve and you begin developing Enterprise JavaBeans (EJB) modules for e-business applications, EJB technology-based support from WebSphere Host Publisher can provide legacy access to new EJB applications development projects, helping to accelerate time to market and reduce associated expense.

Web services

Web services provide an industry-accepted method for applications to connect and interact on the Web, enabling you to publish interfaces to your business processes. This method allows you to streamline interaction with your organizational value net and gives multiple divisions, trading partners, contractors, customers and suppliers the ability to connect business processes and create cross-enterprise transactions.

WebSphere Host Publisher can quickly and easily extend your legacy applications as new Web services.

WebSphere Host Publisher Studio has been enhanced to provide a selectable option so that your existing skills and implementations can be leveraged in creating new Web services. In addition, it now generates new Java technology-based methods specific to Web services that are developed to help optimize network performance and response time when deploying legacy services across a wide area network.

WebSphere Host Publisher is used in conjunction with WebSphere Studio to create Web services and build the corresponding Web Services
Description Language (WSDL). You can also register the Web services within the Universal Description,
Discovery and Integration (UDDI) registry and deploy the Web service on WebSphere Application Server.

A key strength of the Web services industry standard is that existing back-end implementations don't require modification. Your well-tested and operational core information technology structure can be reused without the scheduling impact and risk involved in rework. WebSphere Host Publisher Web services support enables quick migration while leveraging your existing investments.

Additional platform support

WebSphere Host Publisher for IBM @server iSeries[™] is part of the IBM WebSphere Host Integration Solution and the IBM @server iSeries Client Access product family.

WebSphere Host Publisher for OS/390® is available to support IBM @server zSeries[™] environments.

WebSphere software platform: building on a firm foundation

IBM WebSphere Host Publisher is part of the IBM WebSphere software platform—a comprehensive set of integrated, award-winning e-business solutions. No matter where you are in the e-business cycle, the WebSphere software platform can allow you to grow—at the speed the market demands. Building on this robust platform, you can connect diverse IT environments to maximize your current investments and leverage existing skills. Deliver your core business applications to the Web using industry standards like Java-based technology

and XML. And create next-generation applications that differentiate you from the competition. Advance to a powerful platform for integrated e-business—the WebSphere software platform.

For more information

To learn more about IBM WebSphere Host Publisher, visit:

ibm.com/software/websphere/hostpublisher

To learn more about how IBM
WebSphere software platform can help
you succeed in e-business, contact
your IBM representative, IBM Business
Partner or visit:

ibm.com/websphere

IBM WebSphere Host Publisher features at a glance

Back-end data sources

 Supports applications written for 3270, 5250, VT52, VT100, VT220, Java technologybased classes and JDBC technology-enabled databases

Performance and scalability

- Load balancing and failover function are provided through exploitation of WebSphere Application Server, Advanced Edition workload management capabilities.
- WebSphere Host Publisher applications can run unchanged on a supported server platform, allowing you to move your application to a higher-capacity platform as demand increases.
- Dynamic Web pages are precompiled into Java servlets and rerun when a user requests the same page.
- Connection pools improve response time during runtime through connected, logged-on and ready connections.
- Object chaining provides greater flexibility, which can help improve performance through more efficient application flow.

Compatibility and usability

- Supports IBM WebSphere Application Server, Advanced Edition, Version 4.0
- Extends legacy services as new Web services
- Delivers legacy content as new enterprise portal content
- Provides Java 2 Platform, Enterprise Edition (J2EE)-compliant Web application development and deployment
- Enables integration with other IBM connectors, such as IBM WebSphere MQ connectors
- Creates HTML pages, which can be enhanced using industry-standard HTML editors
- Generates reusable Integration Objects, which can be used by WebSphere Host Publisher applications and standard Java technology-based IDEs
- Supports EJB technology-based host access
- Enables you to add new business logic using industry-standard Java development tools
- Allows you to encapsulate interaction and data retrieval with host applications, using GUI point-and-click customization tools
- Provides a load-and-go HTML emulator for 3270 and 5250
- Extends 3270 and 5250 application data in XML format
- Provides remote administration of multiple WebSphere Host Publisher servers from a single Web browser interface

Security

- 128-bit data encryption (RC/2, RC/4, DES and Triple DES)
- SSL 3.0 support (X.509 certificate)

IBM WebSphere Host Publisher, Version 4.0 system requirements at a glance

WebSphere Host Publisher Studio requirements

- Intel® Pentium® 366 processor
- 128MB of RAM (256MB of RAM recommended)
- 230MB of available disk space
- Windows 98, Windows NT, Version 4.0, Windows Me, Windows XP and Windows 2000 operating environments

WebSphere Host Publisher Server requirements

Software

- WebSphere Application Server, Advanced Edition, or WebSphere Application Server, Advanced Edition Single Server, Version 4.0.2
- WebSphere Studio for deployment of Web services

AIX operating environment

- AIX, Version 4.3.3 or 5.1
- 128MB of RAM (256MB recommended)
- 130MB of available disk space

Windows NT operating environment

- Windows NT Workstation or Server, Version 4 with Service Pack 6a
- 128MB of RAM (256MB recommended)
- 130MB of available space

Windows 2000 operating environment

- Windows 2000 Professional Server or Advanced Server
- 128MB of RAM (256MB recommended)
- 130MB of available space

Sun Solaris operating environment

- Sun Solaris, Version 2.6, Version 7.0 or 8.0 running on a SPARC hardware system with Native Threads
- 128MB of RAM (256MB recommended)
- 130MB of available space



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