A fast, cost-effective way to extend your host system for e-business
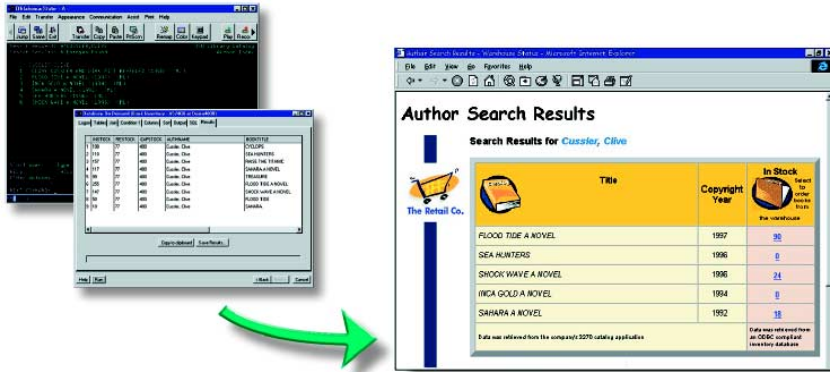
IBM

IBM WebSphere Host Publisher for AIX, Windows NT, Windows 2000 and Solaris, Version 3.5

WebSphere Host Publisher extends existing applications to the Internet—quickly and easily.

Highlights

- **Integrates existing host applications with new WebSphere applications**

- **Extends existing host applications to Web browser users**

- **Consolidates multiple host data sources for delivery as custom HTML or XML to Java applications**

- **Provides access to 3270, 5250, VT52, VT100, VT220, Java classes and JDBC-enabled databases**

- **Supports Enterprise JavaBeans (EJB) host access**

- **Enables remote execution of Host Publisher Integration Objects by Java clients and servers across the network**

- **Exploits WebSphere Application Server, Advanced Edition load balancing and workload management features**

Every successful e-business needs 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 virtually any user with a standard Web browser — a user-friendly vehicle for users who are unfamiliar with traditional green screens.

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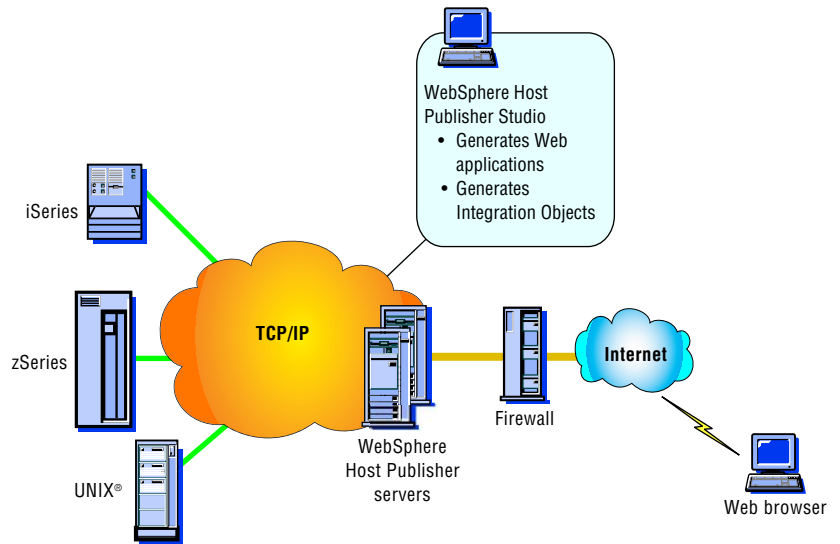
e business

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: Host Publisher Studio and Host Publisher Server. Host Publisher Studio provides an easy-to-use customization environment to create Integration Objects — reusable beans for Java™ applications — that can be used to dynamically access back-end data sources. Host Publisher Server provides the runtime environment to execute Integration Objects created with Host Publisher Studio.

Host Publisher Studio

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

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

WebSphere Host Publisher Studio
• Generates Web applications
• Generates Integration Objects

iSeries

zSeries

UNIX®

TCP/IP

WebSphere Host Publisher servers

Firewall

Internet

Web browser

Supported host applications
• 3270
• 5250
• VT
• JDBC

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

Scalability
• Cloning
• Load balancing
• Failover

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.

WebSphere Studio, Professional Edition is included as part of WebSphere Host Publisher. WebSphere Studio provides all the tools needed for complete WebSphere Host Publisher e-business implementation, such as HTML or JSP editing, new business logic creation and site deployment enhancements. Host Publisher Studio runs on Microsoft® Windows NT®, Windows® 2000, Windows 95 and Windows 98 operating systems.

Host Publisher Server
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.

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 improves 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 Host Publisher Studio, eliminate the overhead of establishing, connecting and disconnecting separate connections for each host request.

By exploiting WebSphere Application Server, WebSphere Host Publisher enables applications to be integrated 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 interactive development environment (IDE)—for example, IBM VisualAge® for Java—to add new business logic to WebSphere Host Publisher implementations.

Host Publisher Server runs on IBM AIX®, Sun Solaris™, Microsoft Windows NT and Windows 2000 operating environments, allowing applications created with the common Host Publisher Studio to run unchanged in all 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 Host Publisher Server; and then, the information is delivered to the Web browser user through standard HTML. Easy-to-use GUIs, like wizards, 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 Host Publisher Server.

Provide flexibility

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

Host Publisher Remote Integration Object (RIO) support enables remote Java applications or applets running on a remote client or server to execute Host Publisher Integration Objects as though they were physically running on WebSphere Host Publisher Server.

Through its Extensible Markup Language (XML) gateway, WebSphere Host Publisher provides access to existing 3270 and 5250 applications in an XML format for use within new e-business applications. Additionally, the HTML mapper capability provides a load-and-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 occasional access to the host application and do not yet have desktops enabled for Java applications.

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 Internet.

Through multiplatform runtime support of AIX, Solaris, Windows NT and Windows 2000 operating environments, your WebSphere Host Publisher applications can be deployed on the systems which 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.

Grow fast

The need to expand your business applications with new capabilities is a fact in the emerging e-business marketplace. With WebSphere Host Publisher, you have the ability to reuse, expand and compound your initial investment in 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 the beans for Java applications you need for legacy access by new WebSphere applications, thus reducing the programming effort and masking the complexity of host access from the WebSphere application developer.

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

As more and more companies find the need to deliver host applications and data to handheld devices, WebSphere Host Publisher, coupled with IBM WebSphere Transcoding Publisher, can dynamically extend the reach of host data and applications beyond the Web to pervasive technologies, such as SmartPhone devices and personal digital assistants.

Additional platform support

WebSphere Host Publisher, Version 3.5 for IBM @server iSeries will be available as part of the IBM WebSphere Host Integration Solution and the iSeries Client Access product family.* WebSphere Host Publisher for OS/390®, Version 2.2 is available to support OS/390 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 allows 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 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 the 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 classes and JDBC technology-enabled databases

Performance and scalability

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

Compatibility and usability

- Supports IBM WebSphere Application Server, Advanced Edition, Version 3.5
- Includes IBM WebSphere Studio, Professional Edition for developing advanced e-business applications
- Enables integration with other IBM connectors, such as MQSeries
- 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 IDEs
- Supports EJB host access
- Provides access to Host Publisher Integration Objects from remote Java applications or applets
- 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 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 3.5 system requirements at a glance

Memory, hardware and software

- Host Publisher Studio runs on Windows 95, Windows 98, Windows NT, Version 4 and Windows 2000 and requires at least an Intel® Pentium® 366 processor, 256MB of RAM and 102MB of available disk space.
- Host Publisher Server runs on several platforms. Memory, hardware and software requirements for the various platforms are listed below.

Common to all platforms

- WebSphere Application Server, Advanced Edition, Version 3.5, PTF 3

AIX operating environment

- AIX, Version 4.3.3 with Service Pack 2
- 512MB of RAM, 23MB of available disk space

Windows NT operating environment

- Windows NT Workstation or Server, Version 4 with Service Pack 6A
- 256MB of RAM (512MB recommended), 40MB of available space

Windows 2000 operating environment

- Windows 2000 Professional Server or Advanced Server
- 256MB of RAM (512MB recommended), 40MB of available space

Solaris operating environment

- Sun Solaris, Version 2.6, Version 7.0 or Version 8.0 running on a SPARC hardware system with the Native Threads package
- 256MB of RAM (512MB recommended), 21MB of available space

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