

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



# IBM WebSphere Host Publisher

## Highlights

**Extends the reach of mission-critical host information through HTML delivery to any Web user**

**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 multiplatform runtime operating environments, including OS/390, OS/400, AIX, Solaris and Windows NT**

**Includes WebSphere Application Server, Standard Edition**

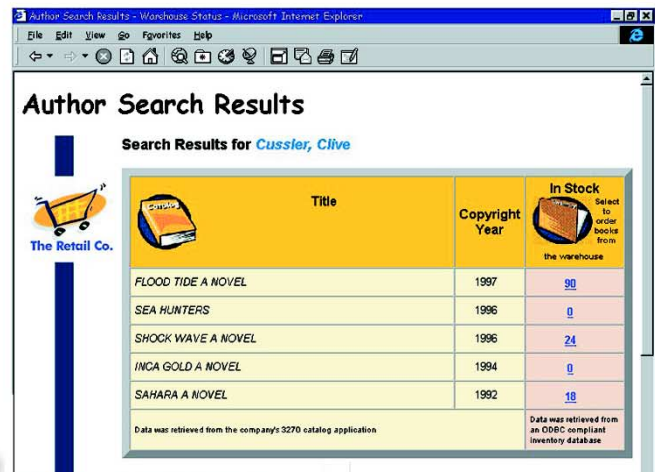
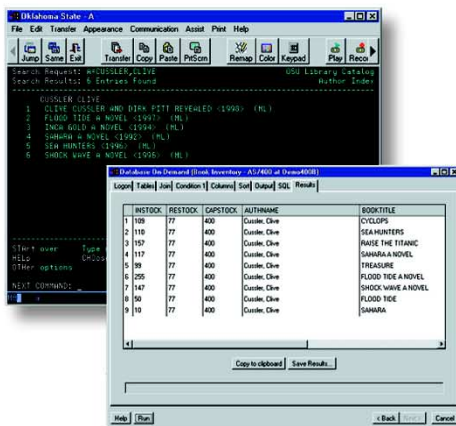
**Integrates WebSphere Studio, Professional Edition for developing advanced e-business applications**

**Produces reusable Integration Objects which work with WebSphere Host Publisher applications and other Java applications**

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

Making host information available through the Internet is an integral part of successful e-business. Web-to-host integration is one of the fastest ways to extend existing business-critical applications to your employees, trading partners and customers.

IBM WebSphere™ Host Publisher is a Web-to-host solution built to address the unique characteristics of the Internet. 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 backend systems. It provides the high level of



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

# Extend host data to any Web user

security you need for your Web-based environment, offering support for Secure Sockets Layer (SSL) encryption and authentication, as well as DES-encrypted passwords. And IBM Network Dispatcher, included with WebSphere Host Publisher, provides load balancing and failover so that large enterprises can maximize WebSphere Host Publisher performance, throughput and reliability.

With 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 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 that can be used to dynamically access backend data sources. Host Publisher server, which includes WebSphere Application Server, provides the runtime environment to execute Integration Objects, reusable beans for Java™ applications, created with Host Publisher studio.

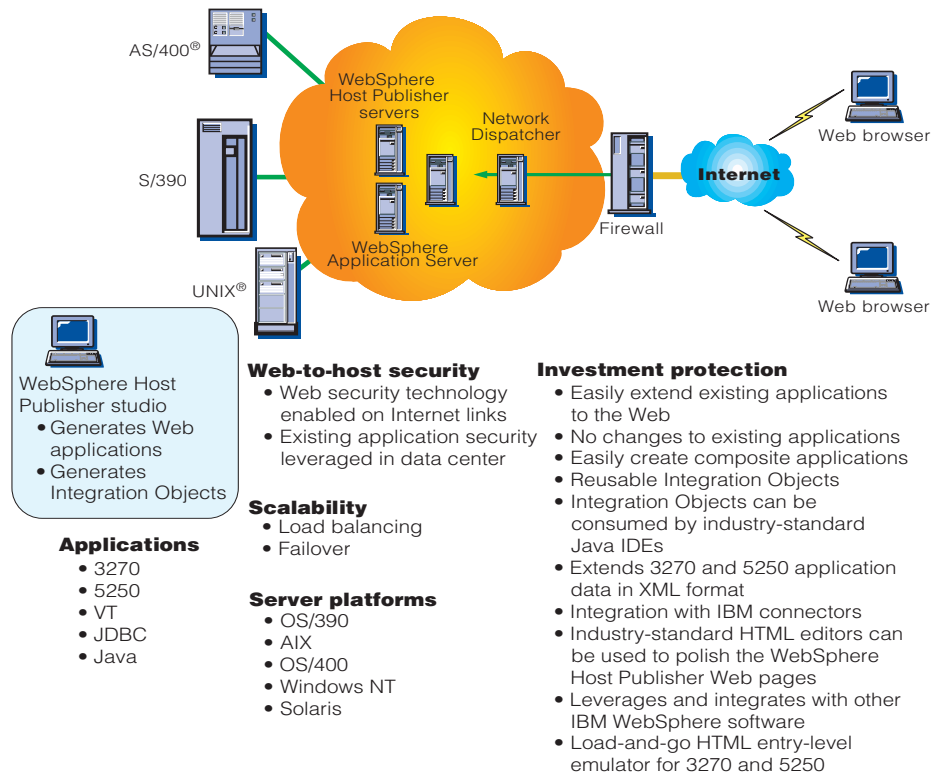
You can create Integration Objects and Web pages using Host Publisher studio, publish them to Host Publisher server and provide transparent host access to users. The inclusion of IBM WebSphere Studio gives you the ability to scale and reuse your original Integration Objects as part of new advanced Web applications and to add new business logic.

## Host Publisher studio

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.

Host Publisher studio generates fully customizable HTML output with imbedded 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 bidirectional implementation allows information to be updated from the Web interface, making it simple to



Host Publisher summary

connect users to backend systems across the enterprise. You can also enhance the generated HTML with your favorite Web authoring tool, such as 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 includes the IBM WebSphere Application Server, Standard Edition and 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 the Host Publisher studio, eliminate the overhead of establishing, connecting and disconnecting separate connections for each host request.

Host Publisher server runs on WebSphere Application Server, Standard Edition. WebSphere Host Publisher utilizes WebSphere Application Server to support the runtime environment for applications that use Integration Objects created by Host Publisher studio. Integration with WebSphere Application Server provides WebSphere Host Publisher applications with access to IBM connectors, including

IBM MQSeries®. You can also reuse Integration Objects within new, WebSphere-based applications or 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.

WebSphere Host Publisher provides a runtime version of WebSphere Application Server. If you need or already use the advanced features of IBM WebSphere, Advanced Edition or IBM WebSphere, Enterprise Edition, you can use your products to support the WebSphere Host Publisher runtime environment.

Host Publisher server runs on IBM OS/390®, IBM OS/400®, IBM AIX®, Sun Solaris™ and Microsoft Windows NT 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 complexity associated with exploiting Internet technologies. Create new composite applications that mine information from various data sources — without modifying your backend systems. Integration of backend systems is performed on the Host Publisher server; and then, HTML is delivered to the end-user Web browser. Easy-to-use GUIs, like wizards, allow Web designers to create and manage new composite applications. These applications combine multiple backend 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 the Host Publisher server for production access by users.

**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 the WebSphere Host Publisher server.

Through its 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 at users who need occasional access to the host application and do not yet have desktops enabled for Java applications.

**Scale reliably**

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

Through multiplatform runtime environment support of OS/390, OS/400, AIX, Solaris and Windows NT operating environments, your WebSphere Host Publisher applications can be deployed in your varying and growing computing environment.

The inclusion of IBM Network Dispatcher enables you to spread the load of user network traffic across a pool of Host Publisher servers.

**Grow fast**

Beyond the movement of key host applications to the Web, the need to expand your business applications with new capabilities is important 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.

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.

### **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.

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#### **IBM WebSphere Host Publisher features at a glance**

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<b>Backend data sources</b>	<ul style="list-style-type: none"><li>• Support applications written for 3270, 5250, VT52, VT100, VT220, Java classes and JDBC-enabled databases</li></ul>
<b>Performance and scalability</b>	<ul style="list-style-type: none"><li>• Load balancing and failover are provided by IBM Network Dispatcher, which runs on AIX, Windows NT, Windows 2000, Linux® and Solaris operating environments.</li><li>• 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.</li><li>• Pages are precompiled into Java servlets and rerun anytime a user requests the same Web page.</li><li>• Connection pools improve response time during runtime through connected, logged-on and ready connections.</li><li>• Object chaining provides greater flexibility and performance.</li></ul>
<b>Compatibility and usability</b>	<ul style="list-style-type: none"><li>• Includes IBM WebSphere Application Server, Standard Edition</li><li>• Integrates IBM WebSphere Studio, Professional Edition for developing advanced e-business applications</li><li>• Enables access to other IBM connectors, such as MQSeries</li><li>• Enables you to create HTML pages, which can be enhanced using industry-standard HTML editors</li><li>• Lets you generate reusable Integration Objects, which can be used by WebSphere Host Publisher applications and standard Java IDEs</li><li>• Provides access to Host Publisher Integration Objects from remote Java applications or applets</li><li>• Enables import of Java classes created outside WebSphere Host Publisher to WebSphere Host Publisher applications</li><li>• Allows you to encapsulate the interaction and data retrieval with host applications, using GUI point-and-click customization tools</li><li>• Provides a load-and-go HTML emulator for 3270 and 5250</li><li>• Extends 3270 and 5250 application data in HTML format</li></ul>
<b>Security</b>	<ul style="list-style-type: none"><li>• 128-bit data encryption (RC/2, RC/4, DES and Triple DES)</li><li>• SSL 3.0 support (X.509 certificate)</li></ul>

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## IBM WebSphere Host Publisher system requirements at a glance

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### Memory 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® 166 processor, 128MB of RAM and 90MB of available disk space.*

*Host Publisher server runs on several platforms. Memory requirements for the various platforms are listed below. All platforms require a machine with at least 256MB of RAM; at least 512MB of RAM recommended.*

- OS/390, Version 2 Release 7, or higher, requires WebSphere Application Server, Standard Edition, Version 1. 2, running on a machine with at least 512MB of RAM
  - OS/400, Version 4 Release 4, or higher, running on a machine with at least 512MB of RAM
  - AIX, Version 4.3.2, or higher, running on a machine with at least 256MB of RAM
  - Solaris operating environment, Version 2.6 or 2.7 SPARC, with the Native Threads package, running on a machine with at least 256MB of RAM
  - Windows NT, Version 4 requires Service Pack 4, or higher, running on a machine with at least 256MB of RAM
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### 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



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