White paper



# IBM SecureWay Host Publisher and IBM WebSphere software.

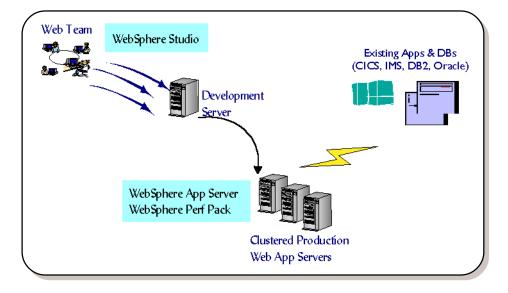


IBM<sup>®</sup> SecureWay<sup>®</sup> Host Publisher and IBM WebSphere<sup>™</sup> software are built based on the IBM Application Framework for e-business and complement each other. WebSphere software focuses on providing infrastructure for developing and deploying server-side Java applications as well as tools to develop, deploy and manage Web sites efficiently. Host Publisher focuses on consolidating multiple existing applications—without modification—to present a single, integrated view in a Web browser, leveraging security, scalability and availability features that are essential for the deployment of e-business applications. Together, these initiatives deliver a leading edge solution for both the integration of existing applications and the deployment of new applications within the Internet.

### WebSphere product family

The WebSphere product family is a set of products that include WebSphere Application Server, WebSphere Performance Pack and WebSphere Studio.

WebSphere Application Server provides a runtime environment for Java<sup>™</sup> technology servlets with database connectors with common database formats. Application Server is built on a Java-based servlet engine that turns ordinary Web servers into Java-enabled Web application servers and allows customers to go beyond static Web publishing and to implement e-business solutions. Application Server works with most industry-standard HTTP servers, including those from Netscape and Microsoft<sup>®</sup>, as well as the Apache, Lotus<sup>®</sup> Go and Lotus Domino<sup>™</sup> Web Servers. WebSphere Application Server is available on Microsoft<sup>®</sup> Windows NT<sup>®</sup>, Sun Solaris<sup>™</sup>, IBM AIX<sup>®</sup>, Linux<sup>®</sup>, IBM AS/400<sup>®</sup> and IBM OS/390<sup>®</sup>.



The servlet runtime, a component of WebSphere Application Server, allows customers to develop and deploy servlets in a consistent manner regardless of the underlying HTTP server, and to convert CGI scripts to Java servlets easily, providing a significant performance improvement, high portability of servlets and low maintenance of their Web server environments. The servlet runtime also provides a capability to maintain user session states, which is essential for enabling e-business solutions.

The WebSphere Application Server also provides connectors to databases and other back-end applications such as IBM CICS<sup>®</sup> and IBM IMS<sup>™</sup> for access by the new Java technology applications being deployed.

*WebSphere Performance Pack*, also available on Windows NT, Sun Solaris and IBM AIX, includes intelligent load-balancing components that are derived from the load-balancing and server-monitoring software used on the Nagano Olympic Web site. It includes the SecureWay Network Dispatcher, a reverse proxy server and the AFS distributed file system, and is used for routing client requests to multiple servers based on the workload of participating servers. The output from the server is routed directly to clients without passing through Network Dispatcher.

*WebSphere Studio* provides Web development tools that support a team of developers working together. It includes servlet generation wizards (for building Java technology servlets easily), Web development workbench (that provides a helpful Web site project organizer and a launch platform for preferred content tools), NetObjects ScriptBuilder (for text-based editing of HTML and script), NetObjects Fusion (for building advanced-function Web sites with point-and-click) and IBM VisualAge® for Java.

# **IBM SecureWay Host Publisher V2**

IBM SecureWay Host Publisher Version 2 is a Web-to-host solution designed to address the unique characteristics of the Internet. Host Publisher allows you to quickly and easily integrate a wide variety of interactive host application types with the Web without having to change the existing application itself. A key component of the SecureWay Host Integration portfolio, Host Publisher allows you to integrate multiple sources of data into a single, consolidated Web page. Application types supported include 3270, 5250, virtual terminal (VT), Java Database Connectivity (JDBC) databases and Java technology applications. The Host Publisher Studio component provides an easy-to-use graphical customization environment to create reusable *integration objects* that dynamically access back-end data sources. Integration objects are industry-standard Java-based objects that capture the interaction with the existing applications, can be embedded within Web pages and used by industry standard Java technology development environments for new Web-based applications.

The Host Publisher Server consists of IBM WebSphere Standard Edition and Host Publisher runtime components for executing the Web-to-host integration objects created with Host Publisher Studio. Server platform support is available for IBM S/390<sup>®</sup>, IBM AIX, Windows NT and Sun Solaris.

### Security

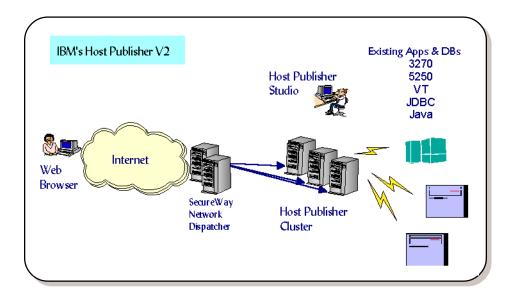
Because Host Publisher software integrates existing applications within industry-standard Web pages, all of the security mechanisms available within the Web today can be implemented to control authentication and access to existing applications, including the use of Secure Sockets Layer (SSL) to encrypt the data transfers. In addition, all of the security mechanisms deployed for the existing application system remain available to control access and authorization to these applications and services.

#### Scalability and availability

Scalability and high availability are critical elements of Web-to-host Internet implementations. In addition to the high-performance characteristics of individual Host Publisher servers, Host Publisher includes IBM SecureWay Network Dispatcher to load balance Web requests across a cluster of Host Publisher servers and provide fail-over support should one of the servers become unavailable. This server clustering capability combined with Host Publisher fail-over protection provides industry-leading scalability and availability for the high-volume, unpredictable world of the Internet.

#### Wide range of existing application types

The flexibility to integrate a wide range of existing applications with the Web is an important requirement to ensure the Web-to-host solution implemented today will not only address current business objectives, but be able to support future business objectives as well. Host Publisher supports the following types of existing applications: 3270, 5250, VT, JDBC databases and Java technology applications. In addition to the existing application types supported by Host Publisher Studio directly, Host Publisher has been designed to allow you to easily integrate IBM Connector implementations within Host Publisher. For example, an IBM MQSeries® Connector implementation can easily be integrated within a Host Publisher 3270 Web-to-host implementation with a single composite Web page being created for the Web user.

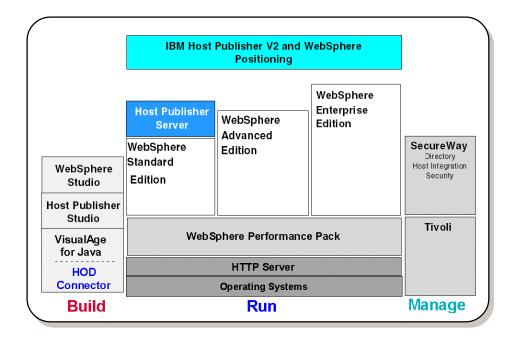


# Summary

IBM WebSphere and Host Publisher software complement each other and deliver a leading-edge solution for both the integration of existing applications and the deployment of new applications within the Internet. WebSphere software focuses on the development and deployment of server-side Java applications, while Host Publisher focuses on extending and integrating existing applications within the Internet.

Host Publisher V2 uses WebSphere Application Server Standard Edition as a key component of its runtime environment. Host Publisher V2 includes WebSphere Application Server Standard Edition for platforms that do not already ship WebSphere as part of the operating system. Host Publisher generation of reusable Java-based Host integration objects enables the synergy and couples the value with the WebSphere family of products. Host Publisher integration objects can be reused within new WebSphere software applications to provide access to existing host applications for the new applications being developed with WebSphere, thereby enabling customers to leverage their investment in Web-to-host application extension into the new Web-based applications being developed.

The WebSphere family of products, notably VisualAge for Java, can be used to easily add new business logic to an existing Host Publisher implementation. Thus providing the flexibility to easily evolve Host Publisher implementations over time using industry standard Java technology development and deployment environments.



In summary, IBM has aligned its strategic Web-to-host e-business solutions on a common technological foundation, centered around Java technology and the Application Framework for e-business. The result is leading-edge solutions for application extension and integration with the Web by the IBM SecureWay Host Integration Solution that can be leveraged by new Web-based application and business logic development and deployment within an IBM WebSphere software implementation.



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