

Leverage legacy data with new e-business solutions.



Extend the reach of your business information.

Merging your network with the Web

The Web and its associated technologies offer you virtually unlimited ways to extend the reach of your business information. As a result, providing access to information stored on IBM **@server** iSeries™, IBM **@server** zSeries™ and other back-end systems, such as UNIX®, Microsoft® Windows NT® and Microsoft Windows® 2000 system-based servers, is more important than ever. Your critical business information and applications most likely reside on host systems like these. The quantity and quality of your business information, combined with the reach of the Web, presents you with the opportunity to transform that information into a powerful competitive advantage.

Merging Web technology with your existing information systems defines e-business. And building an e-business means finding a solution that provides a fast and cost-effective way to access, integrate and publish host information to Web-based clients.

With IBM WebSphere® Host Integration Solution, you can start simple and grow your e-business fast, leveraging your legacy data with new e-business solutions to help maximize your total return on investment. In a single offering, you get everything you need to create and deploy advanced e-business applications that rely on host systems. Whether you want to give your host applications a Web look and feel without programming, or integrate multiple legacy applications into a single Web page, IBM WebSphere Host Integration Solution software has the answer. Now with both IBM WebSphere Application Server, Advanced Edition and IBM WebSphere Studio, Professional Edition, you can create and deploy host

access e-business applications. You can use any of the IBM WebSphere Host Integration Solution programming technologies, such as Host Access Beans for Java and Host Access Class Libraries (HACL) to deliver dynamic host content using Java™ servlets, JavaServer Pages™ (JSP™), Extensible Markup Language (XML) technology and Enterprise JavaBeans™ (EJB) components.

IBM WebSphere Host Integration Solution offers industry-leading host access with unmatched flexibility for multiple environments. This product portfolio integrates with and leverages the IBM WebSphere software platform, a comprehensive set of award-winning integrated e-business solutions that can allow you to quickly meet evolving market needs.

What is IBM WebSphere Host Integration Solution?

IBM WebSphere Host Integration Solution comprises industry-leading IBM software communication clients and servers that you can purchase in a variety of combinations according to the needs of your network:

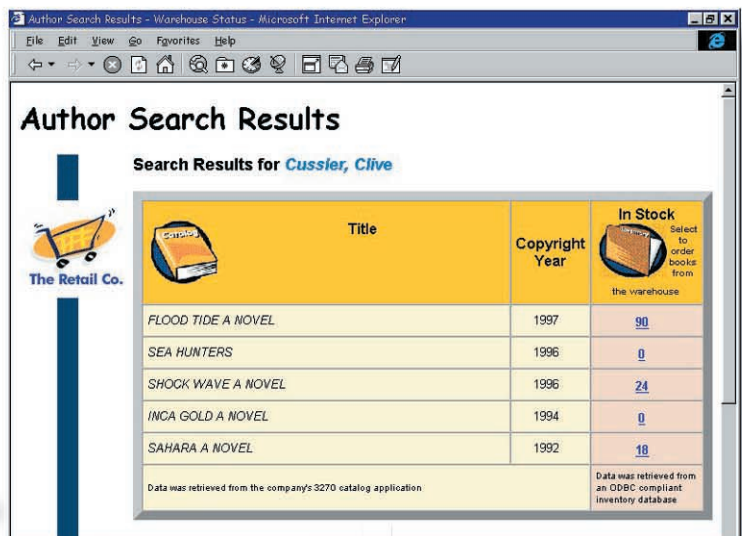
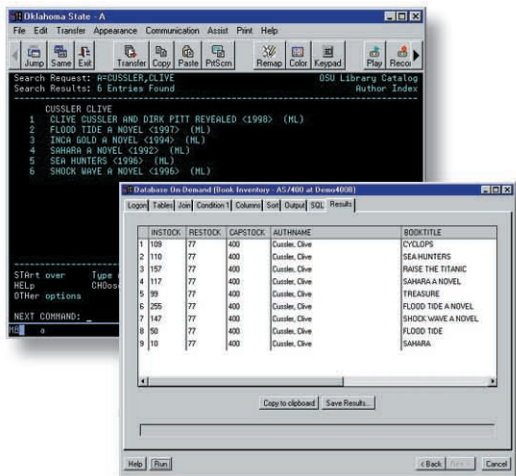
- *IBM WebSphere Host On-Demand—A Java technology-based, thin-client terminal emulator supporting 3270, 5250 and VT emulation and an extensive set of programming tools for custom e-business application development.*
- *IBM Screen Customizer—A drag-and-drop customization tool that converts host screens into graphical user interfaces (GUIs) without any programming.*
- *IBM WebSphere Host Publisher—A Web-to-host product that extends mission-critical host applications to the Web without requiring changes to existing applications. It provides a quick and easy way to implement e-business.*

- *IBM WebSphere Application Server*—A powerful deployment environment for Java applications and components, including support for EJB technology with clustering, caching, security and transaction support for e-business applications. *WebSphere Application Server, Advanced Edition* combines the control and portability of server-side business applications and XML with the performance and manageability of Java technologies and application programming interfaces (API). *IBM WebSphere Application Server, Advanced Edition* also extends the value and versatility of your Web server with such functions as a simple graphical user interface and extensive monitoring and reporting tools.
- *IBM WebSphere Studio*—A comprehensive set of tools that can reduce the time and effort required to build dynamic and exciting Web Applications for Web browsers and pervasive devices. With one of the industry’s first tools for visual layout of dynamic Web pages, *IBM WebSphere Studio* supports JSP technology, full HTML, JavaScript™ and DHTML layout capability, and JSP 1.1 and Servlet 2.2 technologies,

uses wizards—for generating database-driven pages—and even updates and corrects links automatically when content changes. *WebSphere Studio* allows developers to integrate their favorite content creation tool. Tight integration between *WebSphere Studio*, *IBM VisualAge® for Java* and *WebSphere Application Server* lets teams communicate and work together to build sophisticated Web-based e-business applications.

- *IBM Personal Communications*—A comprehensive communications client, including 3270, 5250 and VT emulation as well as a variety of APIs.
- *IBM Communications Server*—A multipurpose networking server featuring an advanced SNA gateway and a TN server (3270 and 5250).

Individually, these products are powerful tools, but together they provide a comprehensive solution for deploying host-access and e-business applications across intranets, extranets and the Internet. All at a modest cost. You can choose the combination of client, server and platform software you need—in a single offering to precisely meet the needs of your business.



IBM WebSphere Host Integration Solution—Take host applications to the Web quickly.

Reducing administration costs

The same IBM WebSphere Host Integration Solution that extends the reach of SNA and TCP/IP networks within your enterprise can also enable your employees to access the information and applications they need from Web-based clients. For high-performance access to your business applications across an intranet, IBM WebSphere Host On-Demand lets you use a traditional green screen emulation interface—installed on and distributed from a Web server—to help you save money in product deployment and maintenance. Your intranet needs may also include extending host data to new users who are unfamiliar with traditional green screens. With Screen Customizer, you can give that application a Web look and feel without any programming!

Connecting to your trading partners and suppliers

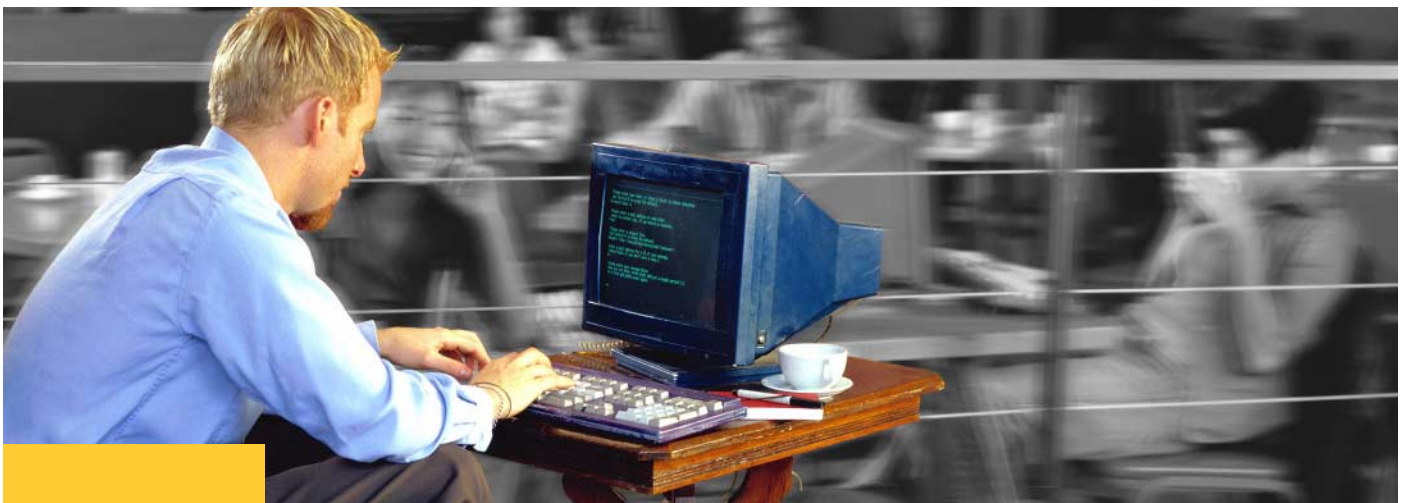
Connect your trading partners, vendors and suppliers to your key business applications. Like your employees using your intranet, your trading partners can generate the same high transaction rates. But unlike your employees, they may not be familiar with a mainframe interface. Screen Customizer converts host screens into a Web-like interface, which is easy to customize without programming, helping to reduce the time and effort required to train new users on host applications.

Available for WebSphere Host On-Demand, Screen Customizer is based on innovative screen recognition using drag-and-drop technology, requiring no change to host applications. Users will see a friendly, Web-like interface instead of a green screen.

Reaching new WebSphere applications

WebSphere Application Server is designed to meet customers' needs for flexibility and speed in developing e-business applications, while WebSphere Host Publisher is designed to extend and integrate existing applications with WebSphere e-business applications and to extend legacy applications to Web users.

WebSphere Host Publisher generates reusable Java technology-based host Integration Objects and EJB access beans, creating synergy with other components of the IBM WebSphere family of products. You can reuse Host Publisher Integration Objects within new WebSphere applications to provide access to existing host applications. WebSphere Host Integration Solution can enable you to leverage your investment in Web-to-host application extension into the new WebSphere applications you'll be developing in the future.



Reaching your customers

The Internet gives you an opportunity to extend the reach of your business to new customers around the world. But, you may have concerns that make you reluctant to take advantage of the Internet's potential. For example:

- *How do you quickly and easily build a customer-oriented application from multiple sources of data?*
- *How do you integrate existing host-based information into Web pages?*

WebSphere Host Publisher helps you answer these questions. You can reach new customers quickly and easily integrate multiple sources of data as part of a single Web page. With WebSphere Host Publisher, you can provide your users with access to host applications and data, regardless of where it resides—3270, 5250, VT, Java classes and JDBC™ technology-enabled databases. The resulting Web-based application requires no special training for your customers, and it can run on almost any desktop system with a Web browser. You'll have a new, user-friendly composite application that accesses information from a variety of sources without requiring modifications to your existing business applications.

And, to help companies deliver host applications to the newest breeds of handheld devices, WebSphere Host Publisher and 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 Transcoding Publisher

is server-side software that adapts, reformats and filters data so that it is formatted for the destination environment, whether it is a business-to-business transaction or an emerging pervasive computing device.

Extending your SNA network

Extending the reach of your network to new environments does not mean abandoning your SNA network. To support SNA connectivity, IBM Communications Server provides a powerful SNA gateway, featuring two of the most advanced SNA networking capabilities available today—Advanced Peer-to-Peer Networking® (APPN®) and High-Performance Routing (HPR). IBM Personal Communications provides client support, including 3270 and 5250 emulation across an SNA environment.

Extending your TCP/IP network

WebSphere Host Integration Solution can also extend the reach of your TCP/IP networks. In the TCP/IP environment, Communications Server acts as a Telnet server for both 3270 and 5250 communication. On the client side, Personal Communications and WebSphere Host On-Demand provide the same 3270 and 5250 emulation capabilities and also add VT emulation. The multiprotocol support of Communications Server and Personal Communications enables SNA applications to work with your TCP/IP network and your TCP/IP sockets applications to run over your SNA network with no modification.

Building a flexible solution

Because most enterprises have a variety of hardware, software and networking architectures, IBM WebSphere Host Integration Solution is designed to accommodate complex networking environments. The client and server products in IBM WebSphere Host Integration Solution are capable of running in a variety of operating environments, like Microsoft Windows, IBM AIX®, IBM OS/2®, Sun Solaris™, IBM OS/390®, IBM OS/400® and Linux®. And with the promise of Java technology, IBM WebSphere Host On-Demand can run on nearly any client providing the appropriate JVM support.

IBM WebSphere Host Integration Solution supports multiple networking protocols. Personal Communications and Communications Server offer support for TCP/IP and SNA network environments. Both of these products also provide multiprotocol transport networking (MPTN), which allows applications to run in most network environments. For example, SNA applications can run over TCP/IP networks and TCP/IP sockets applications can run over SNA networks. You can make decisions about buying applications based on value to your business without being limited by networking dependencies.

Protecting your e-business data

Security is fundamental when extending the reach of critical business information to users across public networks like the Internet. To address this, IBM WebSphere Host Integration Solution supports Secure Sockets Layer (SSL) authentication and encryption, helping to ensure the secure transport of sensitive information across your network. IBM WebSphere Host Integration Solution works with existing host security systems, such as IBM RACF®.

With client and server authentication support, IBM WebSphere Host On-Demand can present a digital certificate (X.509) to a Telnet server, such as IBM Communications Server for OS/390, for authentication. Through a cryptography API, WebSphere Host On-Demand is also smart card-enabled. With the Express Logon feature, 3270 users can log on to a host system without having to enter a user ID or password. WebSphere Host On-Demand uses digital certificates sent to RACF through the IBM Communications Server in place of user IDs and passwords, helping to reduce administration costs and decrease security risks. WebSphere Host Publisher also provides an express logon function so that users with a digital certificate can access host applications without having to enter a user ID or password. WebSphere Host On-Demand can also integrate the SSL client authentication with Tivoli® SecureWay® Trust Authority. This allows enterprises to benefit from industry-standard public key infrastructure (PKI) methods. Users request a certificate form that manages, maintains and ensures certificate validity.

You can combine WebSphere Host Integration Solution with IBM Firewall to help maintain the privacy of your business information as you extend your network across the Internet. Using IBM Firewall and Communications Server, you can



build a virtual private network (VPN) to connect remote users and trading partners. A VPN extends your enterprise's private intranet across a public network, such as the Internet, using a security-rich connection known as an encrypted tunnel. This helps you to prevent unauthorized access to your business data while taking advantage of low-cost virtual networks.

Empowering your application developers

To protect your IT investment and provide a powerful application development infrastructure, IBM WebSphere Host Integration Solution contains a comprehensive set of APIs, including HACL. This object-oriented set of APIs is contained in all of the IBM WebSphere Host Integration Solution products and provides access to 3270, 5250 and VT data streams. With HACL you can use mission-critical information in new ways, such as integrating data from one application with another or replicating information from one data source to another.

Host Access Beans for Java allow your customers and trading partners to rapidly develop custom applications that contain the specific functions needed for your e-business processes. And because Host Access Beans for Java components are object-oriented, they can be reused—in an IBM VisualAge for Java or IBM WebSphere software platform as your e-business needs evolve.

Host Publisher can be used as a JavaBeans component or EJB object generator to quickly and easily create the beans new WebSphere applications need to access legacy applications. Host Publisher Studio delivers a wizard-like interface for bean generation that can eliminate the need for programming. As a result, the time and expense associated with the application development can be significantly reduced.

An industry-leading solution

IBM WebSphere Host Integration Solution can meet your Web-to-host e-business needs today and in the future.

IBM WebSphere Host Integration Solution:

- *Provides a fast, easy and cost-effective way to take host applications and data to the Web*
- *Requires no changes to host applications*
- *Requires no scripting or coding*
- *Addresses all aspects of an e-business network environment: SNA, TCP/IP, intranet, extranet and the Internet*
- *Delivers technology uniquely designed to support specific types of users*
- *Can enable platform and technology migrations without additional purchases*
- *Supports a common development infrastructure and the ability to create and deploy host access e-business applications in a WebSphere software platform environment*
- *Provides security for your e-business transactions*

IBM WebSphere Host Integration Solution offers industry-leading host access solutions with unmatched flexibility for multiple environments, meeting virtually all of your host access e-business needs.

For more information

To learn more about IBM WebSphere Host Integration Solution, visit:

ibm.com/software/webservers/hostintegration



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