



A fast, easy way to take your host applications to the Web.



Meets the changing needs of your e-business

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 S/390®, IBM AS/400® 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, affords you a unique opportunity to transform that information into a powerful competitive advantage.

Merging Web technology with your existing information system 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.

A complete solution for building an e-business infrastructure must be capable of:

- Seamlessly integrating your SNA and TCP/IP networks using Web technology
- Building intranets and extranets to provide your employees and business partners with Web-based access to applications and data
- Giving your host applications and data a Web look and feel
- Extending your business to new customers using the Internet
- Scaling to meet the needs of your changing business environment
- Protecting your business applications and information from unauthorized access

The IBM Host Integration Solution is designed to help you move to e-business quickly, with no changes to back-end host systems.

What is the Host Integration Solution?

The Host Integration Solution is comprised of industry-leading IBM software communication clients and servers that you can purchase according to the needs of your network:

- *IBM Personal Communications*
A comprehensive communication client, including 3270, 5250 and VT emulation, as well as a variety of application programming interfaces (APIs)
- *IBM 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 automatically converts host screens into a GUI without any programming

- **IBM Host Publisher**

Designed to take critical business information to your customers on the Internet, a Web-to-host product that can combine multiple applications and data sources into a single Web page for use by any Web browser

- **IBM Communications Server**

A multipurpose networking server featuring an advanced SNA gateway, a TN server (3270 and 5250) and Host Publisher as an option

Individually, these products are powerful tools, but together they provide a comprehensive solution for deploying e-business and applications across intranets, extranets and the Internet. And all at a modest cost. You can choose the combination of Host Integration Solution software you need — at a single price per user, to precisely meet the needs of your business. As your business grows, you can greatly reduce the risks inherent in capacity planning by scaling the Host Integration Solution — all for a single price per user.

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 the most advanced SNA networking capability available today — Advanced Peer-to-Peer Networking® (APPN®) and High-Performance Routing (HPR). Client support is provided by IBM Personal Communications, including 3270 and 5250 emulation across an SNA environment.

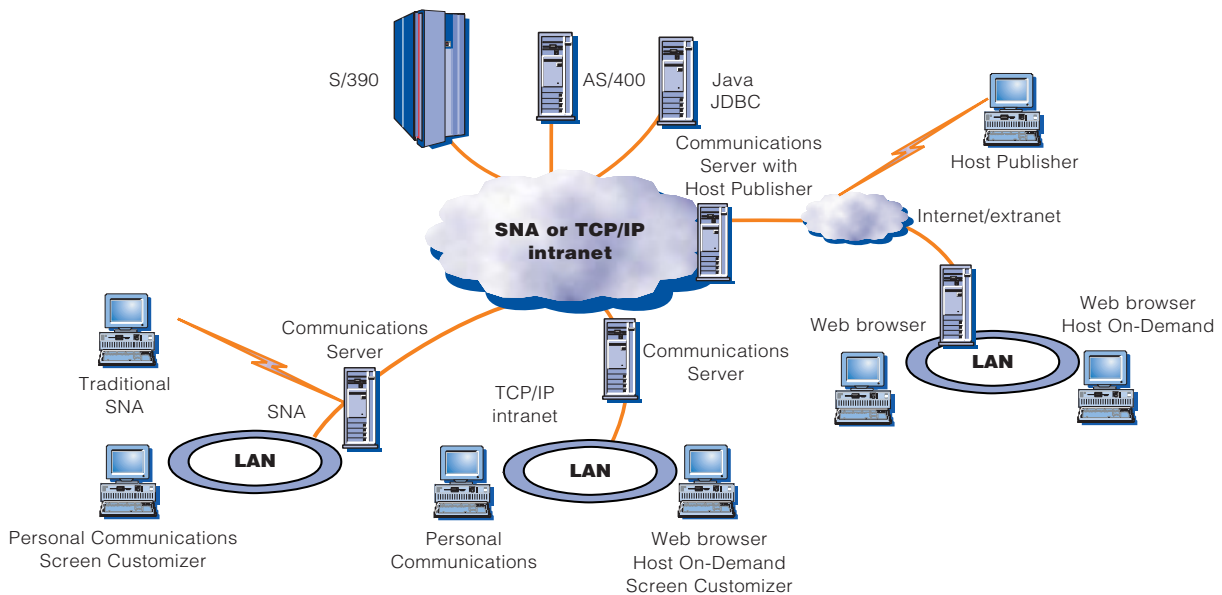
Extending your TCP/IP network

The Host Integration Solution is equally capable of extending 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 IBM Host On-Demand provide the same 3270 and 5250 emulation capability and also add VT emulation. The multiprotocol support

of Communications Server and Personal Communications enables SNA applications to work over your TCP/IP network and your TCP/IP sockets applications to run over your SNA network with no modification.

Building your intranet

The same 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 the intranet, Host On-Demand lets you use a traditional 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 IBM Screen Customizer, you can give that application a Web look and feel without any programming!



Host Integration Solution — a comprehensive solution

Connecting to your business partners and suppliers

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

Available for both Host On-Demand and Personal Communications, Screen Customizer is based on innovative screen recognition using drag-and drop technology, requiring no change to host applications. Users can simultaneously access multiple host sessions, without causing degradation in host response time. After installing Screen Customizer, users will see a friendly Web-like interface instead of a green screen.

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 questions 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 deliver host-based information to untrained users?

Host Publisher helps you answer these questions. You can reach new customers quickly. You can easily integrate multiple sources of data into a single Web page. With 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 new customers, and it can run on any desktop system with a Web browser. You'll have a new, user-friendly composite application that access information from a variety of sources without requiring modifications to your existing business applications.

And, as more and more companies are finding the need to deliver host applications and data to new breeds of handheld devices, Host Publisher and 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. Transcoding Publisher is server-side software that adapts, reformats, and filters data so that it is formatted for the destination environment, whether it be a business-to-business transaction, or an emerging pervasive computing device.

Building a flexible solution

Recognizing the fact that most enterprises have a variety of hardware, software and networking architectures, the Host Integration Solution is designed to accommodate complex networking environments. The client and server products in the Host Integration Solution are capable of running on a variety of

operating environments, like Microsoft Windows, IBM AIX®, IBM OS/2®, UnixWare 7, Sun Solaris™, IBM OS/390®, IBM OS/400® and Linux®. And with the promise of Java technology—Write Once, Run Anywhere™—Host On-Demand can run on any client providing the appropriate JVM support.

The 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 sockets (TCP/IP) applications can run over SNA networks. You 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, Host Integration Solution supports Secure Sockets Layer (SSL) authentication and encryption, helping to ensure the secure transport of sensitive information across your network. The Host Integration Solution works with existing host security systems, such as IBM RACF®.

With client and server authentication support, Host On-Demand can present a digital certificate (X.509, Version 3) to a Telnet server, such as IBM Communications Server for OS/390, for authentication. 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 the Host Integration Solution with IBM Firewall to maintain the privacy of your business information as you extend your network across the Internet. Using the IBM Firewall and Communications Server, you can build a virtual private network (VPN) to connect remote users and business partners. AVPN extends your enterprise's private intranet across a public network, such as the Internet, using a secure connection known as an encrypted tunnel. This enables you to prevent unauthorized access to your business data while taking advantage of low-cost virtual networks.

Empowering your application developers

To protect your information technology (IT) investment and provide a powerful application development infrastructure, Host Integration Solution contains a comprehensive set of APIs, including Host

Access Class Libraries (HACL). This object-oriented set of APIs is contained in all of the host integration 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 customers and business 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 environment as your e-business needs evolve.

A comprehensive solution

Host Integration Solution can meet your Web-to-host e-business needs. Available today, 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
- Enables platform and technology migrations without additional purchases
- Supports a common development infrastructure and the ability to migrate to a WebSphere environment
- Provides security for your e-business transactions

These factors, in combination with your ability to purchase the Host Integration Solution for a single price per user, mean that the IBM Host Integration Solution offers a comprehensive e-business solution for a lower total cost of ownership.

For more information

To learn more about IBM Host Integration Solution, visit:

www.ibm.com/software/network/hostintegration



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