

# Increase productivity with WebSphere Host Access Transformation Services and WebSphere Portal.



### Highlights

- Transforms 3270 and 5250 screens into HTML dynamically, while providing a single universal point of access
- Delivers a single, Web-based interface with access to multiple host applications and other Web-based data
- Helps you dynamically build JSP components with unique sessions for each specific end user
- Provides access to legacy applications in a portal environment without rewriting code

# Providing on demand access to critical business applications

Today's on demand business climate can render green-screen interfaces outdated and difficult to use. But the applications themselves represent a tremendous business investment --- with tremendous business value-and can be expensive and risky to replace. To update these applications with minimal risk, you can improve their user interfaces. IBM WebSphere® Host Access Transformation Services (HATS), combined with IBM WebSphere Portal, can provide a quick and easy way to replace green screens with a point-andclick Web interface. By consolidating applications into a Web portal, you can reduce training costs, improve productivity and provide access to host systems to business partners, suppliers

and customers. Together, HATS and WebSphere Portal let you replace user interfaces without touching business logic. Whether it's developing a single interface where people can interact with all facets of your on demand business. Or creating an on demand business workplace that provides personalized content based on a particular context, with collaborative workspaces and wireless access.

Enterprise portals have become increasingly popular by providing maximum flexibility with a minimum of screen space. WebSphere Portal provides a personalized, single point of access to enterprise information. HATS can run directly in the WebSphere Portal environment and can integrate with other portlets in your portal. Features, such as click-to-action and cooperative portlets, enable you to increase productivity by sharing data between portlets. Credential vault and Web express logon support can allow users to simplify the process of signing on and providing credentials to multiple applications.

# Extend legacy applications to your value chain

HATS gives you the tools that you need to quickly and easily extend your legacy applications to business partners, customers and employees. HATS makes your 3270 and 5250 applications available in HTML format through the most-popular Web browsers, while converting your host screens to a Web-like look and feel. HATS provides a zero-footprint, zero-download, Web-to-host solutionthe only software needed on the client is a Web browser. Among the most valuable HATS features is its ease of use. One or more host screens are converted to graphical user interfaces (GUIs) on the fly, in real time. And with the HATS rules-based transformation engine, you can have your host applications online with a familiar Web interface within a day of loading the program-without having to access or modify source code.

By combining HATS with WebSphere Portal, you can bring relevance and cohesion to your entire IT infrastructure. You can help your employees perform their jobs more efficiently—whether working individually or collaboratively to boost overall productivity. And make business processes and information easily accessible, where appropriate, to people and applications throughout your value chain.

WebSphere Portal extends the capabilities of HATS to help you create an interactive point of access to your enterprise data, applications and people. Offer an integrated user experience. Build a robust infrastructure to manage enterprise content. Protect your systems from unauthorized access and improve the availability of business-critical information. And keep your on demand business up and running while you earn a quick return on your investments.

#### Improve your graphical user interface

HATS can add drop-down lists, tables, radio buttons, tabbed folders and much more to your host screens. Instead of having to use the PF keys on the keyboard, users can click the functions on the GUI. Or they can click the word that describes the key's function, such as clicking the word help when they need assistance. Users can go to input fields with the mouse instead of having to use tabs or arrow keys to navigate the screen. Your users can point and click their way through your entire host application — just like on the Web. With HATS, users of your legacy applications can have the same type of experience that they have using other Web applications.

Integrating this interface with WebSphere Portal lets you use portlets (the visible, active components in a portal page, such as e-mail) to help you control the active flow and display of information, so portal users have the most up-todate information available. WebSphere Portal software also includes tools to help employees with different skill sets—such as administrators, business users and Java<sup>™</sup> programmers—to create customized portlets to meet their needs.

The versatile portal framework lets you provide access to enterprise applications, such as enterprise resource planning (ERP), customer relationship management (CRM) and supply chain management (SCM) applications to improve employee productivity and business-process efficiency. IBM continues to support a commitment to open standards by providing a portlet application programming interface (API) so you can easily extend the portal framework to meet emerging on demand business needs.

### Improve presentation with HTML

Not only can HATS make your GUIs more functional, it can also improve their appeal. Adding HTML to your host screens is easy-from logos and graphics to pictures and backgrounds. With HATS, you can give your host applications the same look and feel as your Web applications. You can add Web links anywhere you like on the screen. You not only have the ability to design screens to fit your organization's needs, you can also present your business in a way that is professional and appropriate, rather than being constrained by the presentation of your legacy applications. By integrating these capabilities with WebSphere Portal, you can give users on demand access to critical business applications through a single Web-based interface.

# Rules-based technology provides quick access to information

A key feature of HATS is its ability to accurately recognize one or more host screens and transform them in real time to a Web interface, according to a set of predetermined rules. You can modify default rules included with the product according to your specific needs and tastes. HATS allows you to assign different rule sets to different end-user communities. You can give a single host application a variety of looks appropriate for different user groups. Alternatively, you can use a single rule set on different applications, which will enable you to reuse your work across multiple legacy applications. HATS includes a variety of options, or widgets, to transform host-screen elements into HTML screen components. Widgets include drop-down lists, radio buttons, hot-link lists, button tables and bar graphs. You can also customize these widgets or create your own to meet unique requirements.

HATS macro support lets you provide programmed navigation through multiple legacy screens. For example, you can take your end users directly to the first screen they need to see, bypassing all screens in between. Or you can combine data from multiple host screens, as well as multiple data sources, into a single HATS screen. HATS macros are easy to generate and allow you to streamline user interactions with host applications. HATS can also use macros created in IBM WebSphere Host On-Demand or IBM WebSphere Host Publisher.

By invoking business rules or by using collaborative filtering technology, WebSphere Portal software can help you dynamically tailor the content displayed to different users and groups. For example, you can customize business rules to show a customer service representative or sales professional product news or information about only the products each sells. A customer or trading partner can view different content depending on individual account balances or past transactions. Personalized content based on past account activity means your customers don't have to re-enter information to get what they need, saving customers—and your customer service staff—valuable time.

With WebSphere Portal, you can make information easier to find on employee intranets - saving you time and money. As your workforce grows, becomes more distributed or as you need to connect previously separate areas of your enterprise, you can leverage advanced portal functionsincluding out-of-the-box, pre-integrated, preconfigured portlets and built-in collaboration tools. For example, portlets in WebSphere Portal help enhance team-wide productivity by enabling employees to view, search, create, convert and edit basic documents, spreadsheets and presentations. All from within their personalized portal work environments.

WebSphere Portal software can also help you provide your trading partners with pertinent, timely information, like contract pricing, terms and conditions, improving the services they offer and boosting trading partner satisfaction. With WebSphere Portal software, you can integrate with systems from other vendors to reduce costs and increase operating efficiencies.

# Providing a protected, unified user experience

HATS offers a broad range of security features, in addition to leveraging the security provided by WebSphere Portal. Secure Sockets Layer (SSL) and HTTP over SSL (HTTPS) provide security between the host application, the midtier server and the end user. HATS appears as a typical user to your host applications, allowing you to take advantage of existing access security systems, such as IBM Resource Access Control Facility (IBM RACF®).

The run-time components of HATS are generated by the HATS toolkit and deployed to WebSphere Portal. The WebSphere software platform provides support for the workload management features required for enterprise-class scalability and availability. Load-balancing and fail-over support functions, such as vertical and horizontal cloning, are handled by the WebSphere Workload Manager component. Vertical cloning allows requests to be distributed across multiple Java Virtual Machines (JVMs), providing fault tolerance. If one JVM fails, a user request can be processed by one of the remaining clones.

Extending your HATS solution to portals lets you leverage security-rich technology to support high-volume, personalized transactions. With authentication and access-control services for Web-based and enterprise applications and resources, you can safeguard customer, supplier, employee and trading partner connectivity, and build trust.

You can also more effectively manage the growth of your business as your IT systems become more complex. Control escalating management costs. And directly tackle the difficulties of implementing security policies across a wide range of Web and application resources. The result? Your customers can use your portals safely and reliably, while you help reduce deployment time and cut cost for new on demand business applications.

An extensible, open architecture

Out of the box. HATS is a robust tool. But HATS benefits aren't limited to just improving your GUI. Because it's built on industry-leading WebSphere software using a Java 2 Platform, Enterprise Edition (J2EE) architecture, HATS has virtually unlimited flexibility and extensibility. Using custom Java development, you can extend HATS to integrate with other legacy systems or J2EE applications. For example, you can use Enterprise JavaBeans (EJB) to add business logic to a HATS project. Or you can use the functions found in IBM WebSphere Host Publisher to transfer data from one application to another. HATS also supports global variables, allowing you to streamline your applications and reduce the amount of input required

by your end users. With additional customization, global variables provide added capabilities for moving data among your host application and other applications and databases. The open architecture of HATS provides almost unlimited flexibility for improving the productivity of your host applications.

With HATS and WebSphere Portal, you also have a repository designed to grow with your enterprise. You can capture, index, store, search and distribute almost any type of digital content, including HTML and XML Web content, document images, electronic office documents and rich media, like digital audio and video. Folder management helps users find what they're looking for quickly and efficiently. Document workflow features increase staff productivity because several employees can easily work on the same document simultaneously. And version control manages multiple versions of documents and objects, including multiple versions of specific document annotations. Whether managed in-house, or through existing content management products from vendors, WebSphere Portal software helps you easily leverage your information assets. You can increase employee productivity, improve customer satisfaction and become the on demand business that you want to be.

## Customize interfaces to suit your business needs

After you have deployed your host application, you might decide to add customization to the project. HATS gives you the ability to uniquely customize individual screens or groups of screens. Because HATS is rules-based, a set of rules that you create to customize a single host screen can easily be applied to numerous screens that share similar customization requirements.

So, although you might create just a few rule sets, you can customize an unlimited number of screens according to these rules. HATS allows you to spend time on the high-traffic and high-value screens—the screens where most of the action and most of the value resides in your host application. Other screens can be converted to a GUI according to the project's default rules. Then, you can display them through your WebSphere Portal interface to provide users with quick and easy access.

You can use HATS to quickly deploy your legacy applications to the Web and deliver immediate value to your business. Later, you can add userproductivity enhancements at your own pace. Unlike other customization software, HATS does not require you to customize each screen. HATS uses the default rules to convert any unassigned host screens to GUIs, while customizing all assigned screens according to the rule sets that you have created. Therefore, HATS will not fail if you make changes to the host application.

### Make the most of critical business assets

Training new users on host applications is time-consuming and expensive. Today's mobile workforce often doesn't have the time or inclination to learn to navigate complex legacy systems. Your business partners and customers want a familiar interface on which they can become productive right away. HATS allows you to present them with a GUI that assures them that your company is modern and up to date. Host applications are performing mission-critical roles in your organization. With a little help on the front end, they can continue to be valuable contributors for many years. With a minimum of time and resources, HATS can help rejuvenate your host applications, allowing your organization to continue to benefit from its substantial investment in legacy systems for years to come.

Take your modernization initiatives to the next level by combining HATS with the robust capabilities of WebSphere Portal. WebSphere Portal software enables you to develop, deploy and maintain cost-effective. small-to-midsize business and sophisticated enterprise portals. And you can take advantage of WebSphere Portal best-in-class portal, content management, collaboration and security technology to help improve employee productivity and earn customer loyalty. HATS, along with WebSphere Portal, can help you reduce costs by leveraging existing investments in enterprise applications, data and security technology - while you evolve your business to meet the challenges of today's on demand business environment.

#### For more information

To learn more about IBM WebSphere Host Access Transformation Services, including technical specifications, visit:

ibm.com/software/webservers/hats

To learn more about IBM WebSphere Portal software products and solutions, including technical specifications, visit:

ibm.com/websphere/portal



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