

IBM Software Group

IBM WebSphere Host Access Transformation Services (HATS) V5 for iSeries

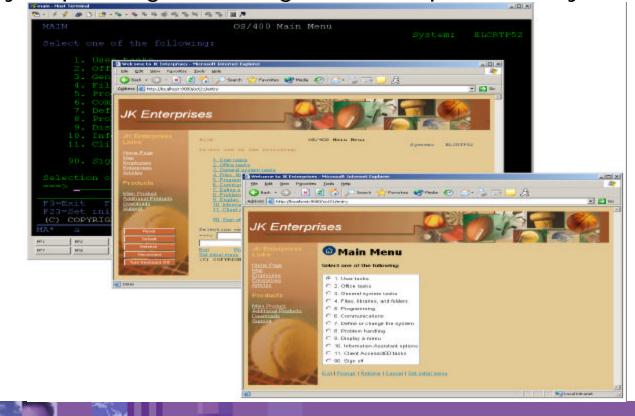
WebSphere. software



What is Host Access Transformation Services (HATS)?

- A rules-based Web-to-host transformation engine...
- •that provides customized access to one or more host applications...
- and dynamically creates a new Web HTML interface,
- -while significantly improving the navigation and productivity of legacy

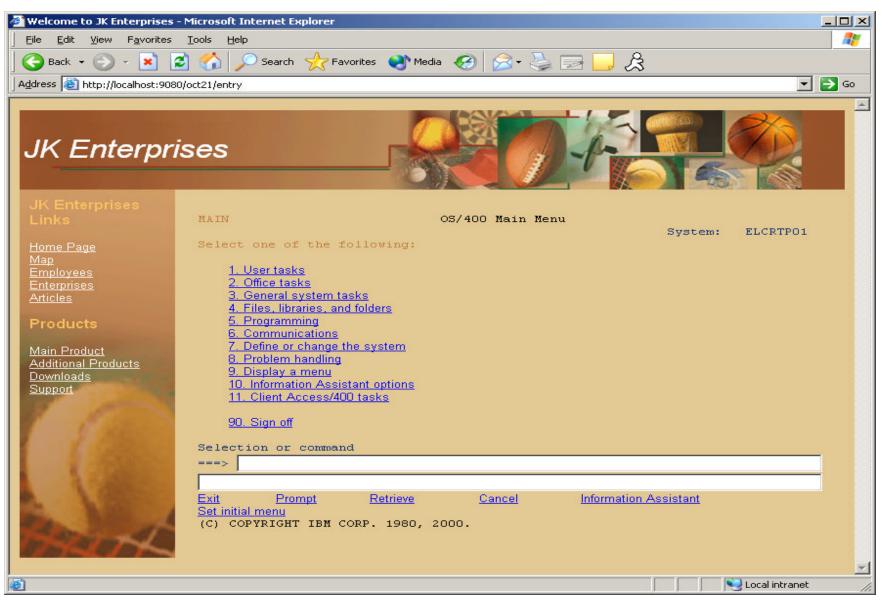
applications.



Traditional Green Screen (OS/400 Menu Screen)

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HATS Transformation Using Default Rules



What is Host Access Transformation Services (HATS)?

- A rules-based Web-to-host transformation engine...
- that provides customized access to one or more host applications...
- and dynamically creates a new Web HTML interface,
- while significantly improving the navigation and productivity of legacy applications.
 - Default rules allow host applications to be on the Web within hours of loading the HATS software
 - No requirement for programming skills
 - No need to customize every screen
 - No need to access or modify source code

What is HATS?

- -A rules-based Web-to-host transformation engine...
- that provides customized access to one or more host applications...
- and dynamically creates a new Web HTML interface,
- -while significantly improving the navigation and productivity of legacy applications.
 - Supports all 5250 screens
 - Merge data from multiple 5250 applications into a single Web interface
 - Add further customization at your own pace

What is HATS?

- -A rules-based Web-to-host transformation engine...
- that provides customized access to one or more host applications...
- and dynamically creates a new Web HTML interface,
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Zero-footprint, zero-download

- Only software needed on the client is a Web browser
- Real-time, on-the-fly transformation means that HATS does not "break down" when changes are made to the host application

What is HATS?

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Improves Navigation & Productivity of Host Applications

Macros & global variables

fSkip unneccesary screens; combine screens; split screens

 $oldsymbol{f}$ Enter data on behalf of the end user

 \boldsymbol{f} Store end user input as global variables; prefill text entry fields

Screen customization

 $oldsymbol{f}$ Add buttons, hot links, drop-down menus, valid value lists

 $oldsymbol{f}$ Modify graphics, fonts, colors, and layout

Tabbed folders

fWizard-based

Bar and line graphs

fWizard-based

- Add business logic
- Local print support
- Native keyboard support

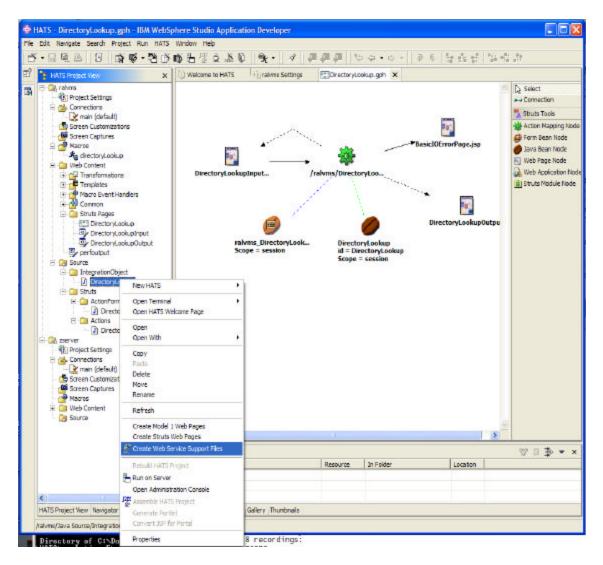


WebSphere-based Architecture

- WebSphere Studio
 - fHATS Studio is a plug-in to WebSphere Studio
 - ➤Wizard-based
 - ➢No programming skills required
- WebSphere Application Server and WebSphere Portal Server
 - **f** HATS leverages WebSphere Application Server (WAS) or WebSphere Portal Server at runtime
 - ► HATS Studio creates a .ear file that is deployed to either platform
 - fHATS is an open, flexible environment for creation of host portlets
 - HATS customization capabilities are ideal for use in portal environment
 - ➤HATS can reduce the amount of information displayed from a host screen, showing only selected data

Application to Application Integration

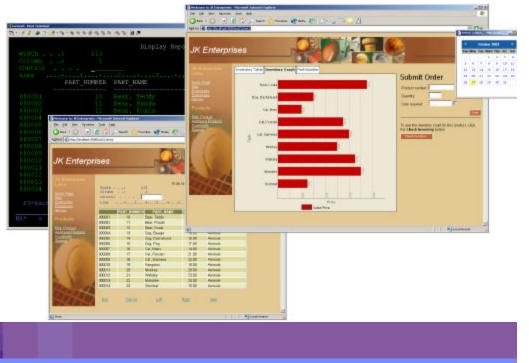
- Create Web Services from programmed interaction of one or more host applications.
 - Use WebSphere Development Studio to add SOAP and WSDL components
- Supports session pooling
 - Create cached, logged-on, ready to use host connections
- Supports Struts-based development
 - Create and modify JSP-based Web transactions using Struts model 2 development



HATS Benefits:

Increased Productivity - Reduced Training Costs

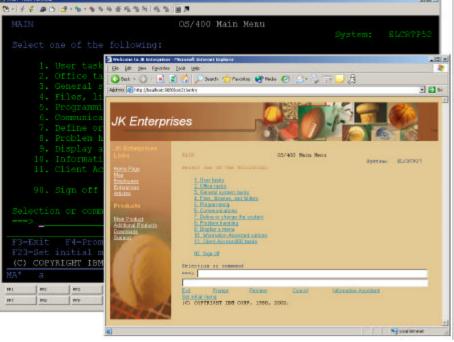
- Increases productivity and reduces training costs as it extends host applications to the widest possible audience...
 - > by delivering HTML to Web browsers,
 - > improving work flow from multiple applications,
 - > and presenting host screens as familiar Web pages.



HATS Benefits:

Entire Application on the Web on Day 1

- Host applications can be quickly deployed to the Web...
 - with green screens converted to GUIs according to HATS default rules...
 - > and further customization added as time and resources permit.



-95

HATS Benefits:

WebSphere Platform Leverage

- •HATS is based on the industry leading WebSphere platform.
 - ➤WebSphere Application Server leads the industry with a 37% market share (Gartner, 5/03).
- •HATS leverages the security, reliability, and scalability of the WebSphere Application Server and WebSphere Portal...
 - ➤as well as the Eclipse-based open standards of WebSphere Development Studio.

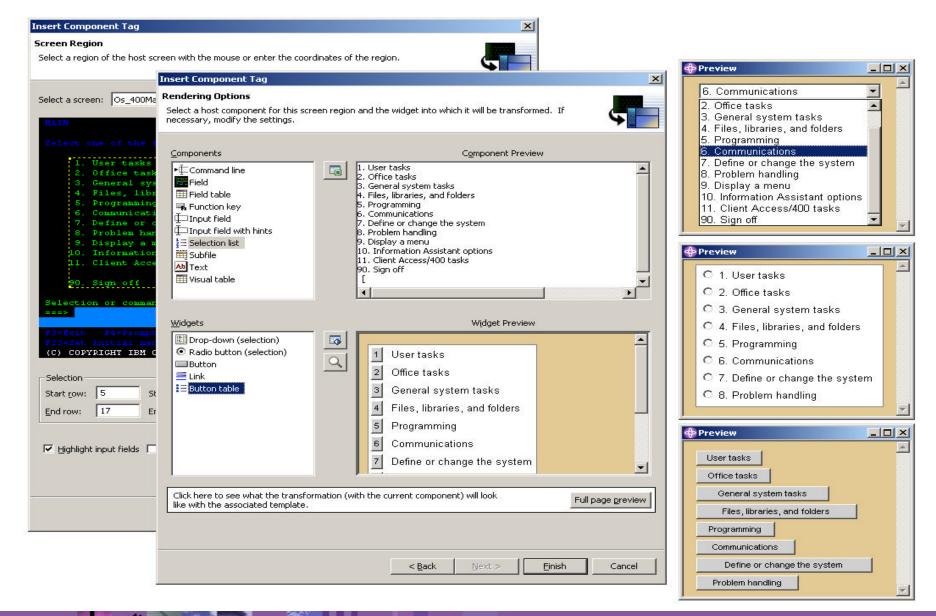


Traditional Green Screen

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HATS Studio



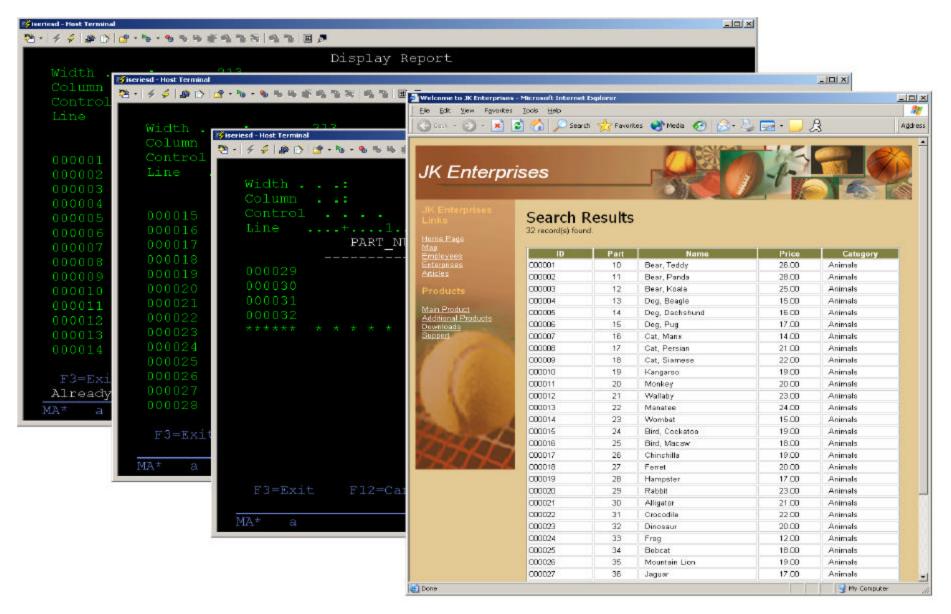
Defining Your Own Rule Sets

- HATS Studio provides easy-to-use wizards for customizing how host components are displayed
- •Use WebSphere Studio or any industry-standard HTML editor to add:
 - Logos, graphics, backgrounds, Web links and other HTML elements
- Customizations are saved as reusable rule sets that can be applied to any host screens that share similar requirements
- HATS can apply:
 - an individual rule set to each host application
 - different rules sets to a single host application for different end user communities
 - the same rule set to multiple host applications

HATS Minor Modifications



HATS - Combining Screens



HATS Benefits:

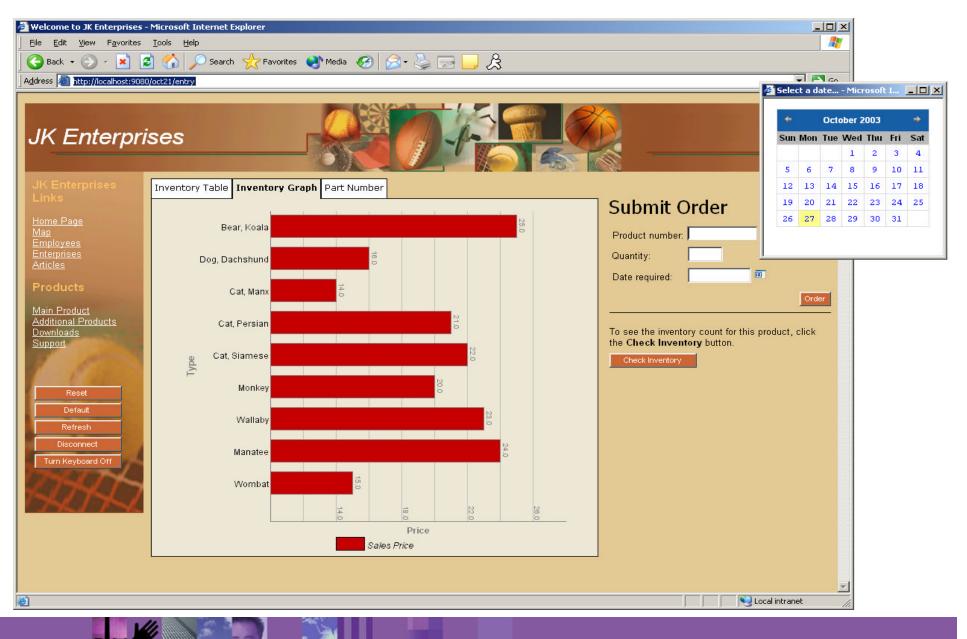
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HATS Customized Transformation



HATS Global Rules and Valid Value Lists

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HATS Integration with WebSphere Portal

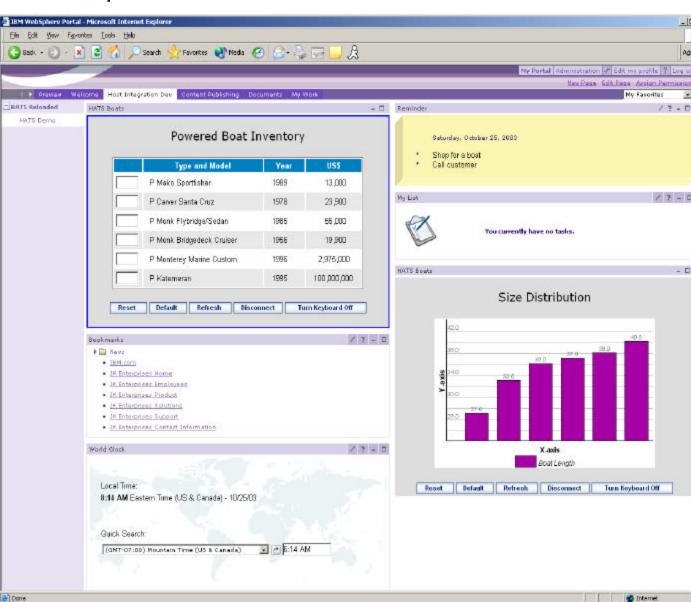
HATS V5 automatically generates portlets for use with WebSphere Portal

> HATS provides an open, flexible environment for creation of host portlets

HATS supports:

- Click-to-Action
- Cooperative Portlets
- Credential Vault
- Single Sign-On

HATS is ideal for use with portals because screens can be customized to reduce the amount of data displayed



- 5

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- 0

HATS Single Sign-On Support

- •HATS supports single sign-on, which allows users to securely logon to multiple host systems while presenting credentials only once
- Increased Productivity
 - Credentials requested only once
 - No need to administer and maintain multiple logon identities
 - Reduced password-related support calls
- Secure
 - Works in conjunction with existing network security applications, such as Tivoli Access Manager
 - Retrieves network security credentials and maps to host credentials
- Extensible to support customized environments

Automated Migration of Host Publisher V4 Projects

Import Host Publisher EAR File	×
Import Host Publisher EAR File	
This wizard will guide you to import a Host Publisher EAR file into a new or existing HATS project.	5
EAR file name: ::\temp\HPV4userlist.ear	Browse
Where do you want to import the resources in the EAR file to?	
Create new HATS project	
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Project name: HPV4userlist	
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HATS Enhanced Administration

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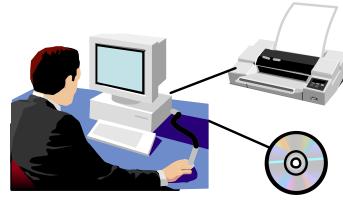
Additional Features



Native Keyboard Support



- Security
 - HTTPs, SSL, Native Host Security



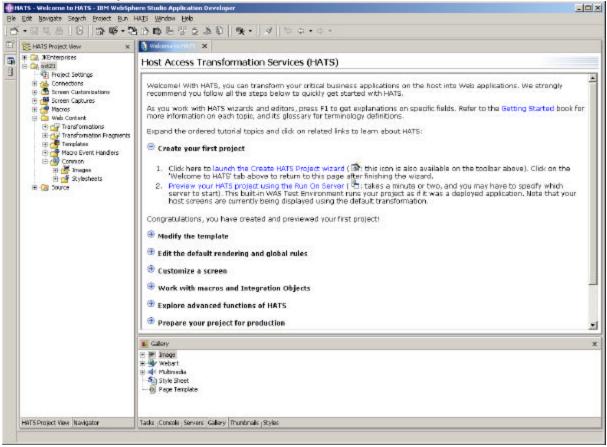
- Local Print Support:
 - Legacy Print Converted to PDF using iSeries Access For Web



100% Accessible

Integration with Eclipse-based WebSphere Studio

- Industry-standard development environment
- Common framework and reusable skill set
- Exploits advanced application development features found in WebSphere Studio, such as team development facilities

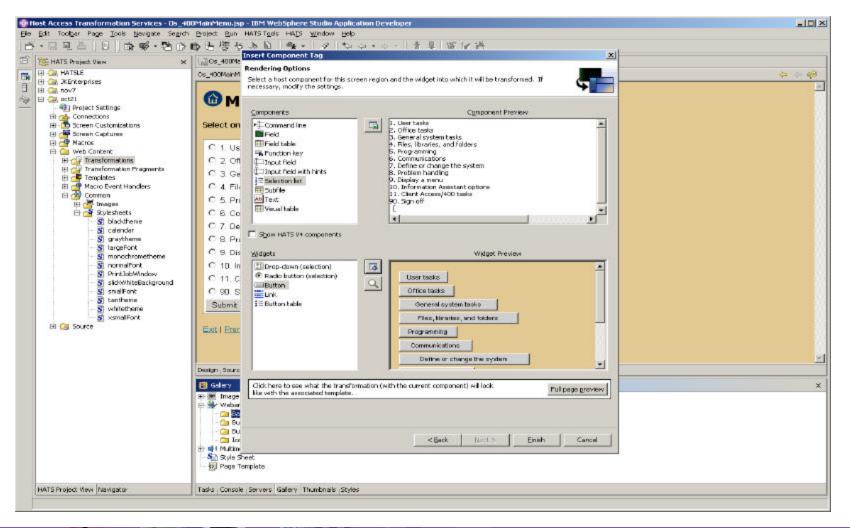


Deployment to WebSphere Application Server

- 4 steps to make a completed HATS project ready for end users to access as a Web application -
 - •Assemble: Build the project in WebSphere Studio, using the HATS Studio plug-in
 - Transfer: Move the file to the WebSphere Application Server
 - Install: Deploy the file to the WebSphere Application Server
 - URL for End Users: Provide users with the URL to the application
- HATS Exploits the Enterprise Class Performance Features of the WebSphere Application Server
 - f Security Secure HTTP (HTTPs), Secure Sockets Layer (SSL)
 - -HATS appears to host system as a standard user so host security is enabled
 - $oldsymbol{f}$ Availability Load balancing and failover support
 - -Features include vertical and horizontal cloning

Supported Server Platforms

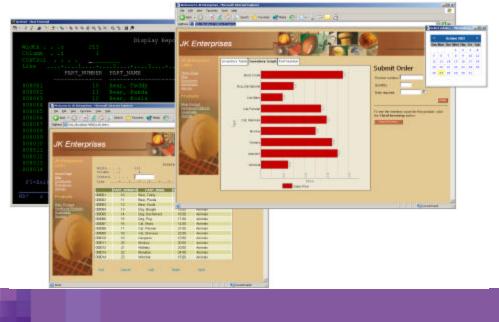
OS/400, Linux, AIX, Windows NT, Windows 2003, Windows 2000, Solaris



Summary

- Host screens are converted to GUIs on the fly, in real time
- Improved navigation of host application
- Zero footprint on the desktop
- Low skills requirement
- Combine screens and data from multiple 5250 applications
- Eliminates need to customize every screen
- Generate Web services from host transactions
- Exploits security & scalability of WebSphere Application Server and WebSphere Portal
- Extensible through WebSphere Studio
- •For more information visit:

ibm.com/software/webservers/hats



HATS Education

www.ibm.com/software/webservers/hats/education.html

- SW912 Introduction to Building Web-to-Host Solutions using IBM WebSphere HATS V5 2 days -Gain a working knowledge of IBM WebSphere Host Access Transformation Services (HATS) V5. Learn how to use HATS Studio to develop applications that allow your organization to protect its investment in host applications by transforming them into Web applications. During extensive hands-on lab exercises, see how the wizards in HATS Studio can help in the development of Web applications.
- SW913 Advanced Web-to-Host Application Integration using IBM WebSphere HATS V5 3 days In this course, students will gain an in-depth understanding of how to transform existing 3270/5250 host applications using IBM WebSphere Host Access Transformation Services (HATS). Through a combination of lecture, demonstration and hands-on lab exercises, participants will learn how to use HATS Studio to develop applications that exploit the advanced features and capabilities of HATS to allow organizations to protect their investment in host applications by transforming them into Web-based applications. The advanced features that will be covered include macros, global variables, Integration Objects, Model 1 and 2 JSP pages to drive the Integration Objects and Web services support using HATS applications
- Host Access Transformation Services (HATS) V5 Development Lab The objective of this lab is to provide you with an understanding on the basics of creating and previewing a Host Access Transformation Services (HATS) application. This will be done through the use of the WebSphere Development Studio Client for iSeries with the HATS plug-in and the integrated WebSphere Application Server Test environment. At the end of the course, you should be able to: create a Host Access Transformation Services Application , preview your HATS project in the WebSphere Application Server test environment, modify the default template, modify the default rendering, customize a screen, and create a macro.
- Creating Portlets with IBM Host Access Transformation Services Version 5 (HATS V5) LAB This lab provides a step-by-step opportunity for the reader to understand the basics of deploying and configuring portlets using IBM Host Access Transformation Services Version 5 (HATS V5). In this lab, a page in WebSphere Portal that contains an IBM WebSphere HATS portlet was created. Using HATS V5, HATS portlets are compatible with the Portal Toolkit in WebSphere Studio, so custom portlets can be created for a HATS application. If the steps in this example were followed, a page similar to the image below should have been created. The HATS application used in this lab is a default transformation of the 5250 green screen with no enhancements or customization.

IBM Enterprise Transformation Resources

- IBM Enterprise Transformation Website
 - http://w3-

103.ibm.com/software/xl/portal/.cmd/cs/.ce/155/.s/828/_s.155/828/_s.155/828?BRAND=websphere&CATE GORY=enterprisemodernization

IBM Enterprise Transformation Demo

http://websphere.dfw.ibm.com/etdemo/index.html

IBM WebSphere Host Integration Demo

http://websphere.dfw.ibm.com/whidemo/

- IBM WebSphere Host Integration Solution Website http://www-306.ibm.com/software/webservers/hostintegration/
- IBM WebSphere Host Integration Customer Comments http://www-306.ibm.com/software/webservers/hi_customers/
- IBM WebSphere Host Integration Business Partners http://www-306.ibm.com/software/webservers/hi_partners/
- IBM WebSphere Host Integration Case Studies http://www-306.ibm.com/software/webservers/hi_casestudies/
- IBM WebSphere Host Integration Solution Library, Brochures, Presentations, Redbooks http://www-4.ibm.com/software/webservers/hostintegration/library.html

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- * iSeries

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