

iSeries. mySeries.

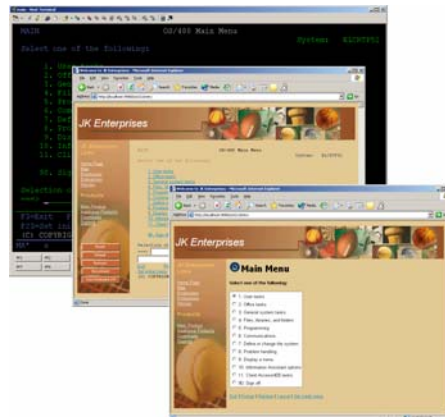
Getting Started with Host Access Transformation Services (HATS)

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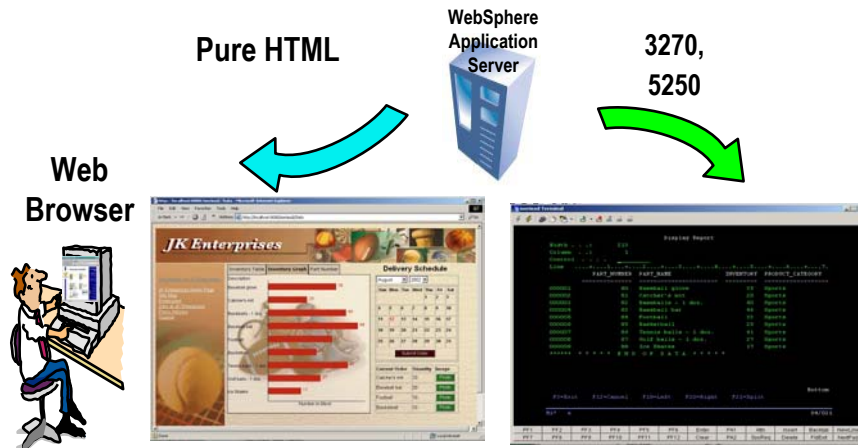
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What is Host Access Transformation Services (HATS)?

- 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.



Host Access Transformation Services



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 Host Access Transformation Services (HATS)?

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- Merge data from various sources into a single Web interface
- Supports transformation and data objects from 3270 and 5250 hosts
- Supports data objects from VT hosts
- Add further customization at your own pace



What is Host Access Transformation Services (HATS)?

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- 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.

- Zero-footprint, zero-download
- Only software needed on the client is a Web browser
- HATS does not "break down" when changes are made to the host application

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What is Host Access Transformation Services HATS ?

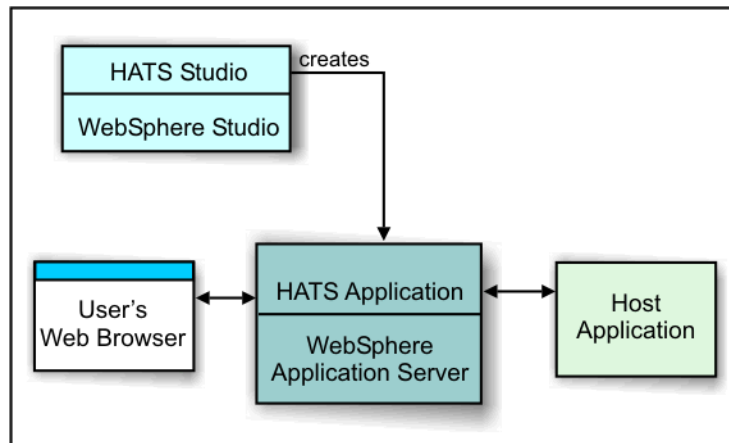
- Host Screens are converted to web-like GUIs on the fly, in real time
- Preserves existing application flow
- Easy web-to-host first step
- Eliminates need to customize every screen
- Low skills requirement
- Rules-based, customizable
- "Near" load-n-go implementation
- Zero footprint on the desktop
- Iterative development
- Unlimited functionality



WebSphere-based Architecture

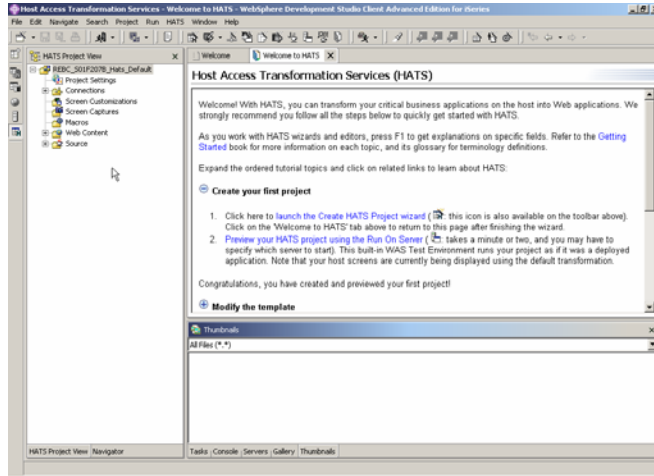
- WebSphere Studio
 - HAS Studio is a plug-in to WebSphere Studio
 - Wizard-based
 - No programming skills required
- WebSphere Application Server and WebSphere Portal Server
 - HATS leverages WebSphere Application Server (WAS) or WebSphere Portal at runtime
 - HATS Studio creates a .ear/.war file that is deployed to either platform
 - HATS 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

HATS has 2 main components

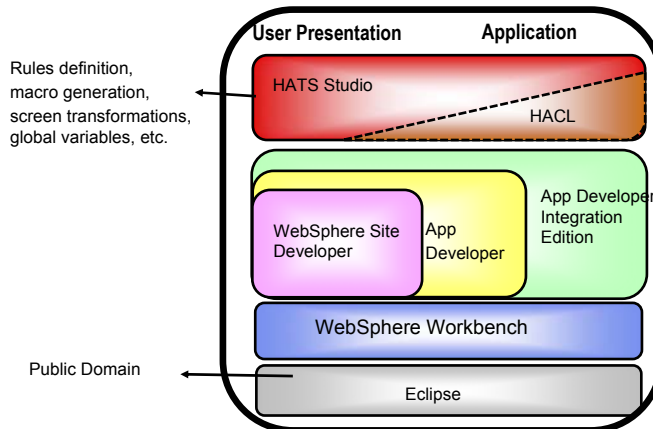


WebSphere Studio is the foundation tool

WebSphere Development Studio Client (WDSc)
- HATS Perspective

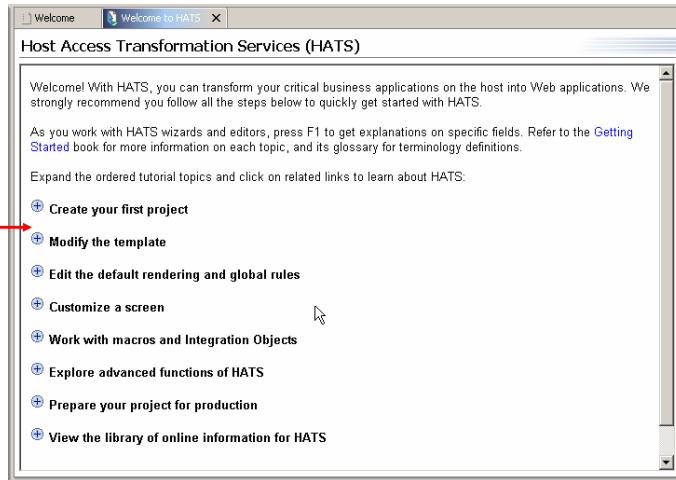


HATS Studio – Tool that Understands Host Applications



HATS Welcome Page

Ordered Tutorials

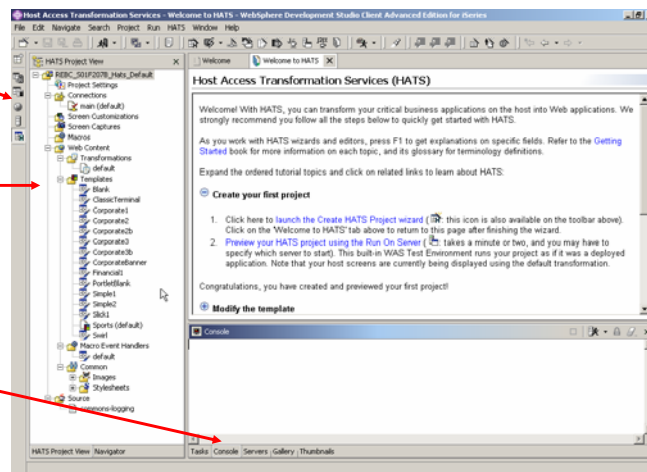


HATS V5 Project View

HATS Perspective

Project folders

Views



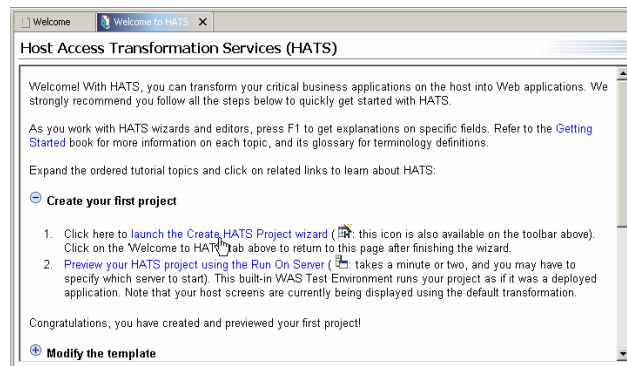
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WebSphere Host Access Transformation Services Configuration Steps using Default Template

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Configuration steps using default template

- Click on the launch the Create HATS Project wizard link from the HATS Welcome page



Configuration steps using default template

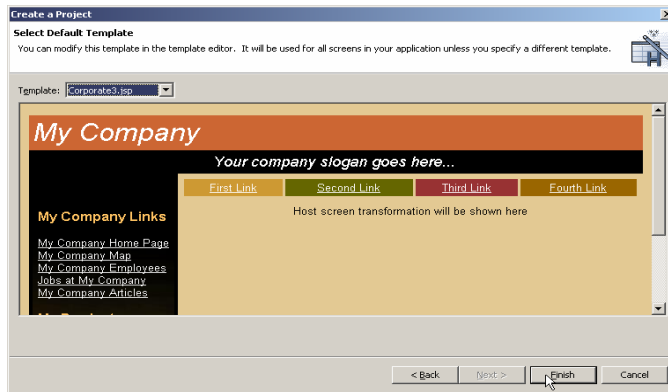
- Enter New HATS project name, description, Enterprise application name

Configuration steps using default template

- Enter connections settings

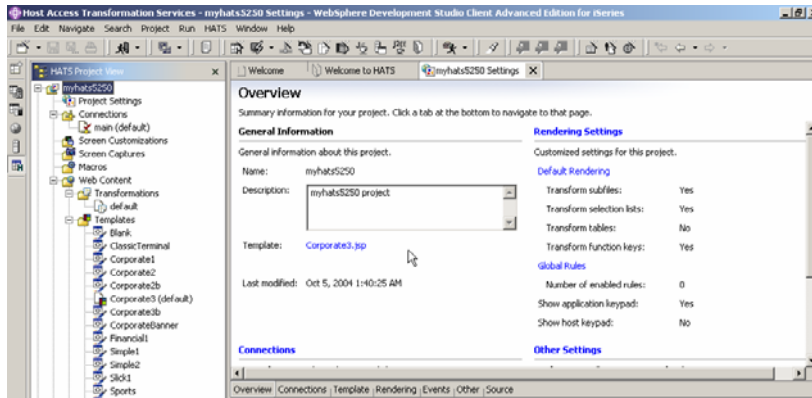
Configuration steps using default template

- Select default template

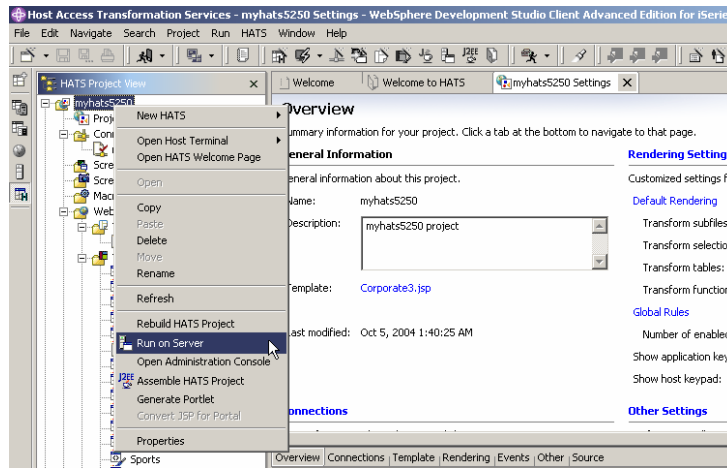


Configuration steps using default template

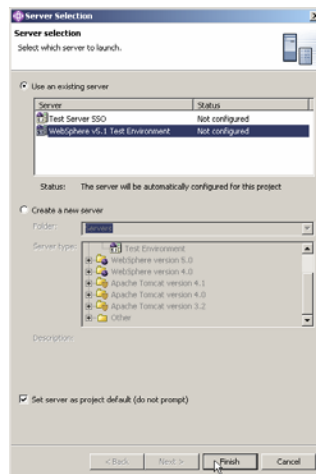
- Project settings page – Summary information for the project



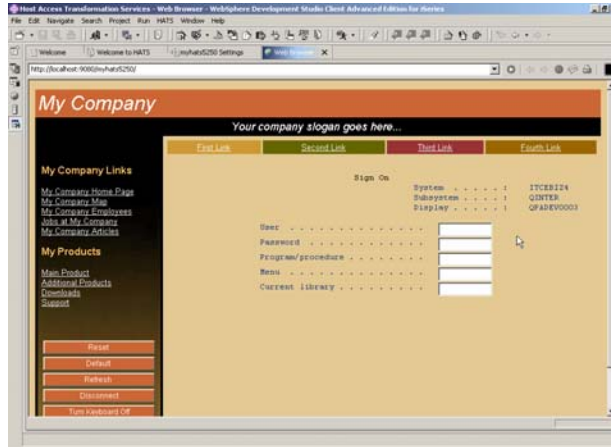
Run the application – WebSphere Test Environment



WebSphere Test Environment – Server Selection

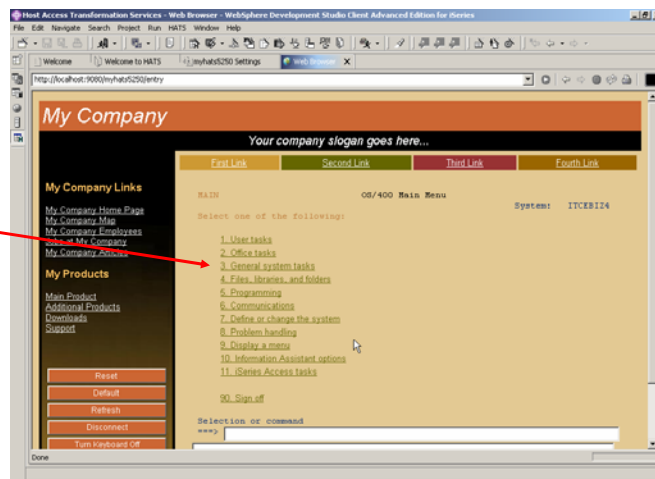


Web Browser opens with connection to host application



Default look and feel – OS/400 main menu

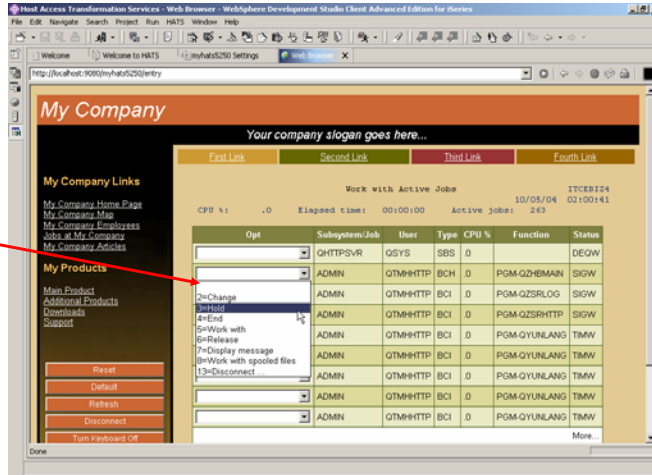
Hyperlinks for menus





Default look and feel – WRKACTJOB command

Drop down list box for options



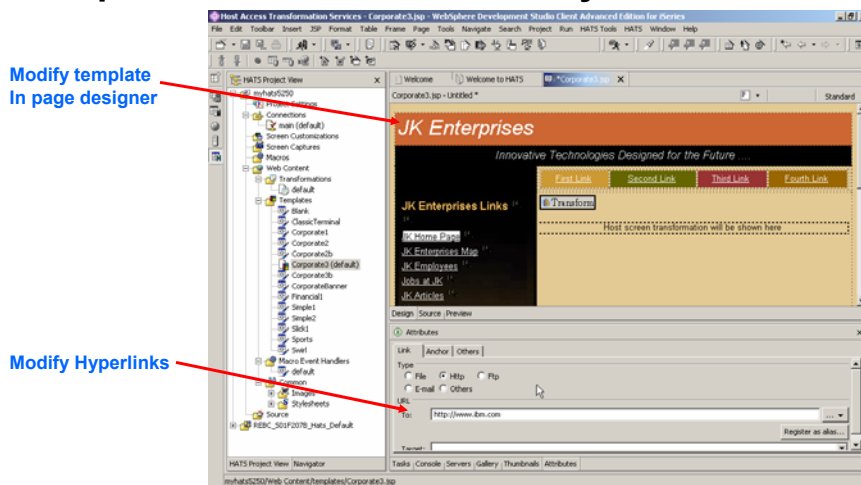
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WebSphere Host Access Transformation Services
Customization

Improves Navigation & Productivity of Host Applications

- Macros & global variables
 - Skip unnecessary screens; combine screens; split screens
 - Enter data on behalf of the end user
 - Store end user input as global variables; prefill text entry fields
- Screen customization
 - Add buttons, hot links, drop-down menus, valid value lists
 - Modify graphics, fonts, colors, and layout
- Tabbed folders
 - Wizard-based
- Bar and line graphs
 - Wizard-based
- Add business logic
- Local print support
- Native keyboard support

Template can modified to meet your needs



HATS Project Settings

The screenshot shows the 'Rendering' tab of the 'HATS Project Settings' dialog. The left pane lists categories: Global Rules, Components, and Widgets. The right pane shows a table of settings for various components.

Description	Component	Widget	Add
Transform dialogs	Dialog	Dialog	Up
Transform subfiles	Subfile	Subfile	Remove
Transform selection lists	Selection list	Link	Down
Transform function keys	Function key	Link	Down
Transform field tables	Field table	Table	Down
Transform visual tables	Visual table	Table	Down
URL	URL	Link	Down
Transform remaining text and input fields	Field	Field	Down

Annotations on the left side of the dialog:

- Default Rendering**: points to the 'Rendering' tab.
- Global Rules**: points to the 'Global Rules' category in the left pane.
- Components**: points to the 'Components' category in the left pane.
- Widgets**: points to the 'Widgets' category in the left pane.

Record Macros

The screenshot shows the 'Record Macro' dialog box overlaid on a 'Host Terminal' window. The terminal displays a 'Sign On' prompt and some system output.

Annotations on the left side of the dialog:

- Host Terminal**: points to the background terminal window.
- Record Macro**: points to the 'Record Macro' dialog box.

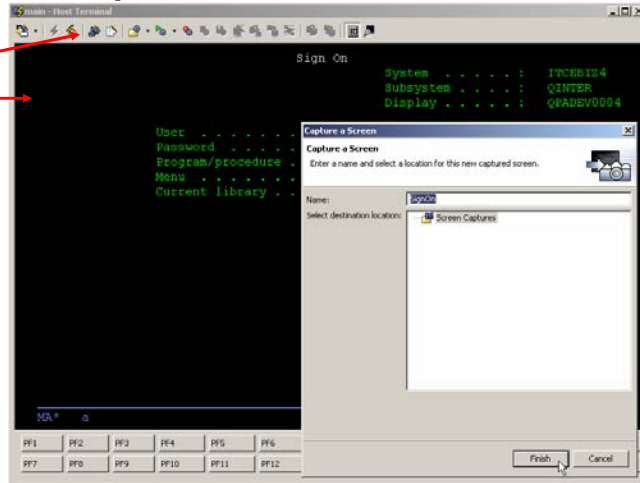
The 'Record Macro' dialog contains the following fields:

- Name:** Input field containing 'SP200'.
- Description: (optional):** Text area.
- Enter or select the destination:** A list box showing the path 'myhats5250\Web Content\WEB-INF\profiles\macros' and several files including 'FILED_S01F2070_Hats_Default', 'myhats5250', and 'Macros'.

Buttons at the bottom include 'Finish' and 'Cancel'.

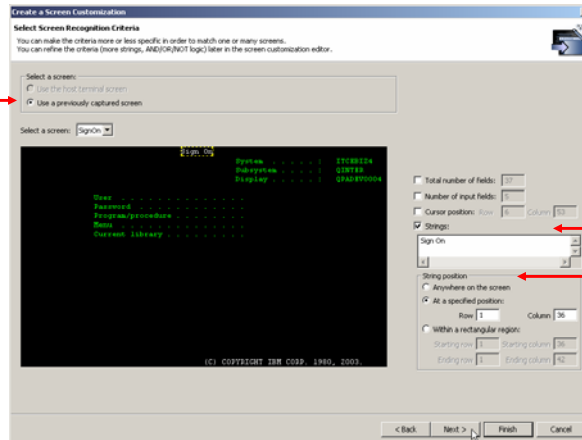
Create a Screen Capture

Capture a Screen
Host Terminal



Screen Customization – Screen Recognition Criteria

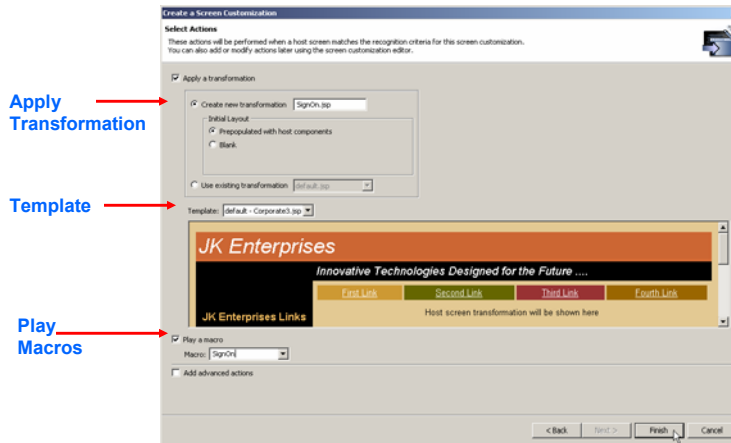
Captured
Screen



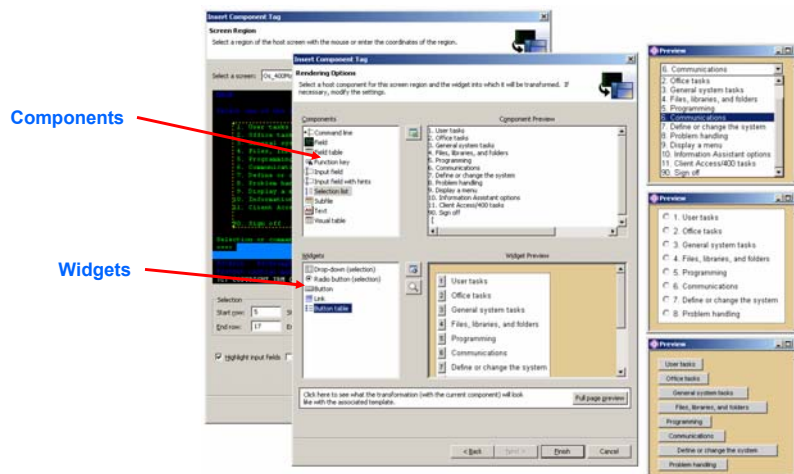
Strings

String position

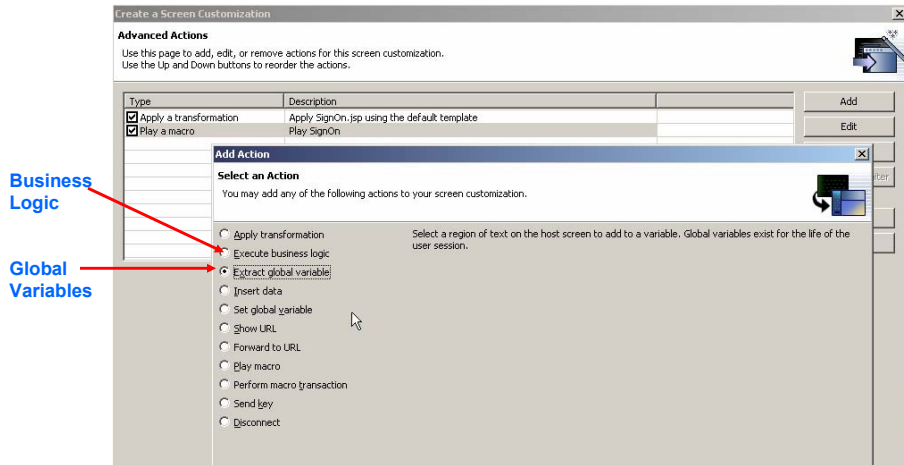
Screen Customization – Select Actions



Screen Customization



Screen Customization – Advanced actions



Defining Your Own Rule Sets

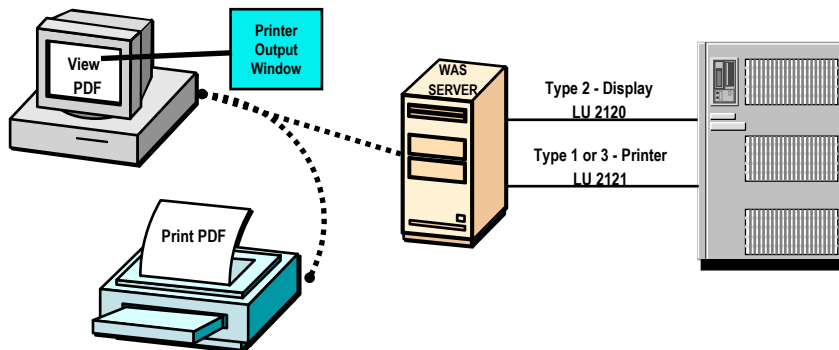
- HATS Studio provides easy-to-use wizards for customizing how host components are displayed
- Import HTML from your Web page
 - Drag and drop HTML elements to create new customized template
- Use WebSphere Studio or any industry-standard HTML editor to add:
 - Logos, graphics, backgrounds, Web links 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

Customized Template – Tab folders, Graph



HATS Print Support

- Need a Printer Logical Unit Associated with a Display Logical Unit
- Print Job is generated then status can be viewed in Printer Output Window Panel
- Print Job can be viewed as a Adobe Portable Document Format (PDF) file



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WebSphere Host Access Transformation Services Administration

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HATS Administrative Console

Connection Management

User Management

License Management

Host Connections

The table below shows all the active host connections. Please click on the connection identifier to view detailed information about the connection. You can select one or more connections to disconnect. You can also toggle the display for one or more connections.

Scope: Application: myhats250EAR Application Server: server1 Node: localhost Cell: localhost

Disconnect Toggle Display Terminal

Total: 1

Connection Identifier	Connection Definition Name	IP Address	TN Serv
<input type="checkbox"/> HostConn.localhost.localhost@server1.myhats250EAR#1	myhats250main	127.0.0.1	Rs004

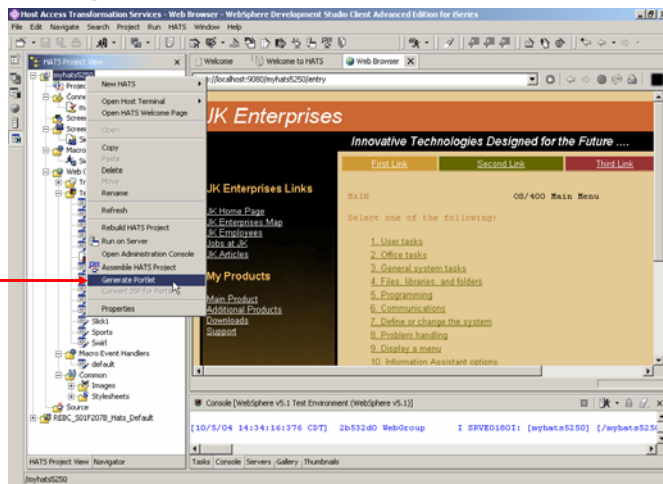
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WebSphere Host Access Transformation Services
Portlet Support

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HATS Portal Integration – Generate portlet

Generate Portlet



Portal Integration – HATS Portlet



HATS 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 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

Need Help? Have a Question?

- Work with your IBM Business Partner for your WebSphere on iSeries needs.
- Use IBM Virtual Innovation Center (VIC) to obtain WebSphere on iSeries assistance
 - All IBM Business Partners can register with the VIC at no additional charge
 - <http://www.developer.ibm.com/welcome/vic.html>
 - For the exclusive use of Business Partners selling, installing, implementing IBM software on iSeries. All software defect related support still should be directed through Supportline and is built into the maintenance of the Software and you can obtain that support from calling 1-800-IBM-SERV or your local country support lines.

Resources

- [HATS Web site](#)
 - <http://www.ibm.com/software/webservers/hats/>
- [IBM WebSphere Host Integration Demos & Labs](#)
 - <http://websphere.dfw.ibm.com/whidemo/>
- [WebSphere Developers Domain](#)
 - <http://www.ibm.com/developerworks/websphere/>
- [Redbooks](#)
 - SG24-6099 - Using IBM WebSphere Host Access Transformation Services V5



Questions ?



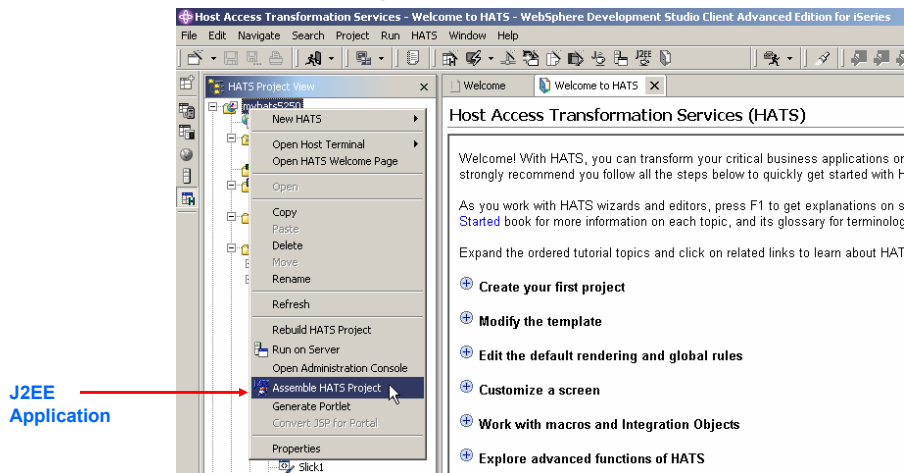
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WebSphere Host Access Transformation Services
Backup Charts

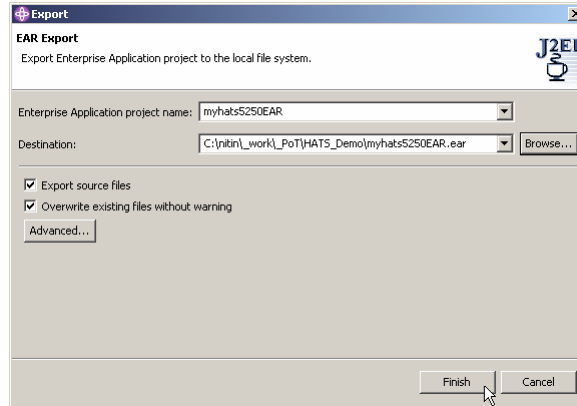
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WebSphere Host Access Transformation Services Preparing Project for Production

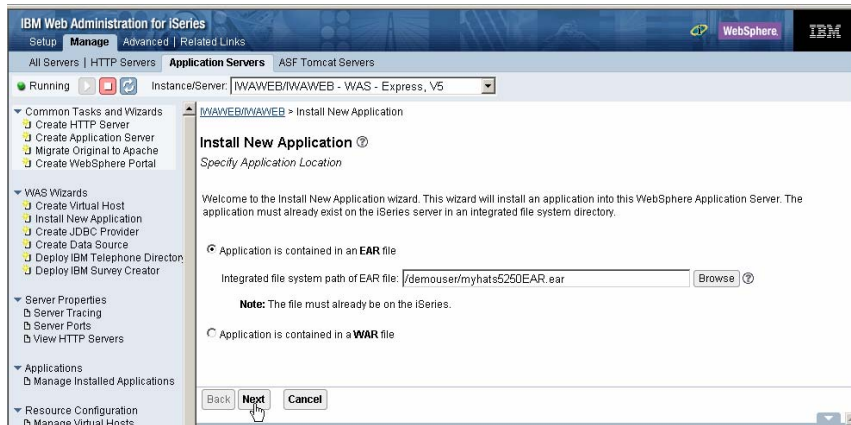
Assemble HATS Project



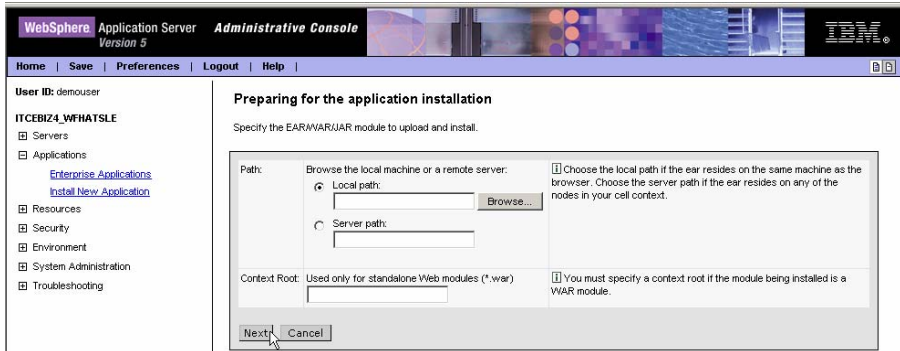
Export EAR file



Deploy the Application in WebSphere Application Server - using IBM Web Administration for iSeries



Deploy the Application in WebSphere Application Server - using Administrative Console



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WebSphere Host Access Transformation Services Installation Requirements



HATS Studio- Hardware / Software Requirements

• Hardware Requirements

- Pentium III 500 MHz, or higher, recommended),
- 512 MB RAM minimum, (768 MB RAM recommended for running debugging in Unit Test Environment)
- 2200 MB hard drive space
- A high-resolution graphic display with a minimum screen resolution of 1024 x 768

Software Requirements

- Windows 2000 Professional with Service Pack 3
- Windows 2000 Server with Service Pack 3
- Windows 2000 Advanced Server with Service Pack 3
- Windows XP Professional with Service Pack 1a
- At least one of the following:
 - WebSphere Development Studio Client for iSeries V5.1.0 or later
 - WebSphere Development Studio Client Advanced Edition V5.1.0 or later



WebSphere Application Server levels required

- WebSphere Application Server V5.0.2 or later
- WebSphere Application Server Network Deployment V5.0.2 or later
- WebSphere Application Server Express V5.0.2 or later
- WebSphere Application Server V5.1.0 or later
- WebSphere Application Server Network Deployment V5.1.0 or later
- WebSphere Application Server Express V5.1.0 or later

Browsers – Other – Limitations

Supported Browsers

- Windows requires: Netscape 6.0 and higher, Internet Explorer 5.5 and higher, Mozilla 1.2.1 and higher, Opera 5.0 and higher
 - AIX requires: Netscape 7.0 and higher, Mozilla 1.2.1 and higher
 - Solaris requires: Netscape 7.0 and higher, Mozilla 1.2.1 and higher
 - Linux requires: Opera 5.0 and higher, Konqueror 3.1 and higher, Mozilla 1.2.1 and higher
 - Mac requires: Safari
- Well behaved browsers that support JavaScript 1.3 and HTML 2.0 are also supported.

Other

- 5250 Print support requires IBM iSeries Access for Web V5R2 (Note: this is available as part of the iSeries Access Family V5R2)
- Web Express Logon requires Tivoli Access Manager Version 4.1.

Limitations

- Host keyboard support feature requires Netscape V6.0 and higher or Internet Explorer V5.0 and higher.
- BIDI support is not available with Netscape browsers. Internet Explorer V5.0, and higher is required.

Requirements for Server Runtime

Requirements for Server Runtime

- HATS generated applications run on OS/400® operating system.
- HATS applications are deployed to a WebSphere Application Server and, therefore, inherit the software requirements of the WebSphere Application Server.
- Each HATS application that you deploy requires additional disk space. The minimum disk space required for each HATS application is:
 - • OS/400®: 21MB



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