



IBM eServerJ iSeriesJ

Session:

Modernize your green screen applications

WebSphere Host Publisher HATS Limited Edition

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ITSO iSeries Technical Forum
SP22

IBM @ server iSeries



Agenda

WebSphere Host Publisher and HATS Limited Edition

- Overview
- Skills / Education
- Packaging / Ordering
- System requirements

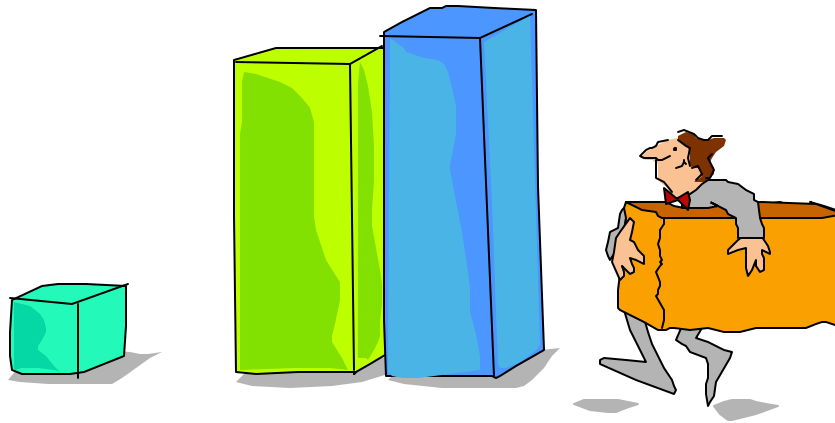
Abstract:

WebSphere Host Publisher and HATS Limited Edition:
Modernize Your Green Screen Applications!

Did you know that both WebSphere Host Publisher and HATS Limited Edition are included in the iSeries Access Family product? WebSphere Host Publisher is a tool you can use to reface and streamline those tired-looking green screen applications into truly web-looking applications without changing your original 5250 application -- you don't even need the source code nor do you need a great deal of programming skills! HATS Limited Edition is another on-the-fly 'green screen eliminator' that requires no programming to use. Simply install it and see how your users can work with all their iSeries screens and applications in a modern, GUI view. These products eliminate PC network administration and desktop configuration as everything runs on the iSeries and only sends HTML to the browser. You will also hear how Host Publisher compares to other IBM refacing tools. By the end of this session, attendees will be able to:

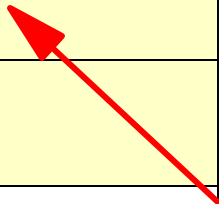
1. Understand the capabilities of Host Publisher and HATS LE.
2. See how to use them in an iSeries network.
3. Know what steps to take next in order to start using them.

Packaging

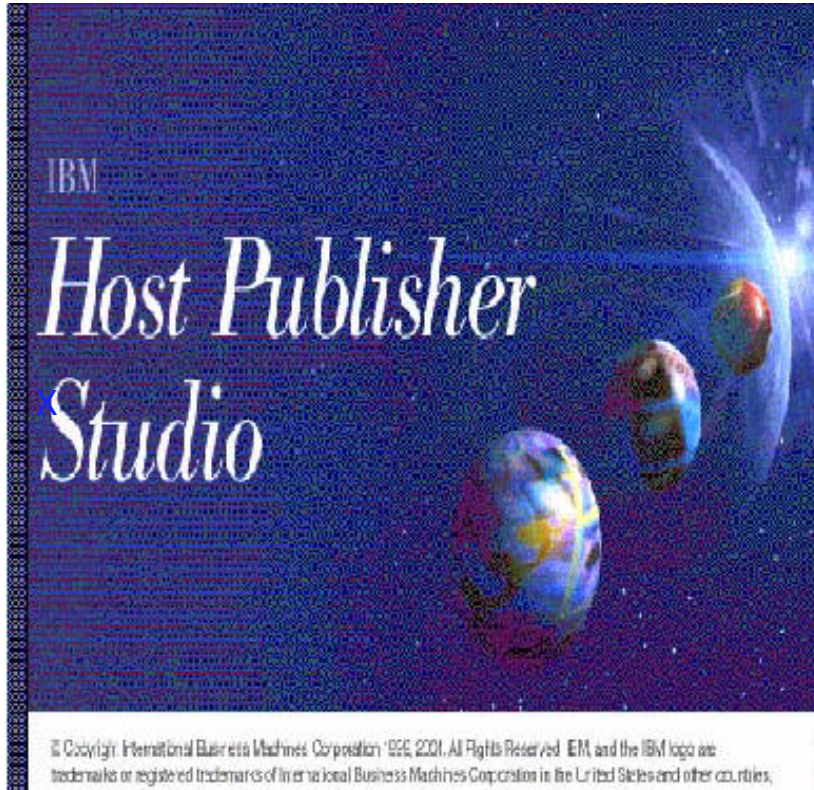


iSeries Access Family - Packaging

V5R2 5722-XW1 iSeries Access Family	V5R1 5722-XW1 iSeries Client Access Family
<ul style="list-style-type: none"> • 5722-XE1, V5R2 iSeries Access for Windows 	<ul style="list-style-type: none"> • 5722-XE1, V5R1 AS/400 Client Access Express for Windows
<ul style="list-style-type: none"> • 5722-XH2, V5R2 iSeries Access for Web 	<ul style="list-style-type: none"> • 5722-XH1, V5R1 iSeries Access for Web
<ul style="list-style-type: none"> • 5724-B81, V4.0 WebSphere Host Publisher 	<ul style="list-style-type: none"> • 5648-E25, V3.5 WebSphere Host Publisher
<ul style="list-style-type: none"> • Starting 6/30/2003 HATS Limited Edition 	
	<p>Customers with Software Subscription can get V5R2 clients by ordering no-charge Feature No. 2645 of Product No. 5722-XW1</p>
<p>After 6/30/2003, current V5R2 customers can get version of Host Publisher that runs on WAS V5 and HATS LE by ordering no-charge Feature No. 2646 of Product No. 5722-XW1</p>	<p>After 6/30/2003, current V5R1 customers can get version of Host Publisher that runs on WAS V5 and HATS LE by ordering no-charge Feature No. 2646 of Product No. 5722-XW1</p>



WebSphere Host Publisher



A cross-server product

Use your Host Publisher skills to work with iSeries and zSeries applications...

Included with iSeries Access Family (5722-XW1) at no additional charge...

Notes: WebSphere Host Publisher

Over the last several years, many products and technologies have been introduced to help extend legacy (typically 3270 and 5250 based) applications and data to a web browser or Java interface. Early solutions typically involved a fairly large Java applet being downloaded to a workstation. Others relied upon an HTML page and HTTP server mode of operation to provide the equivalent of a 5250 or 3270 emulation session. The products have matured and there are numerous options available.

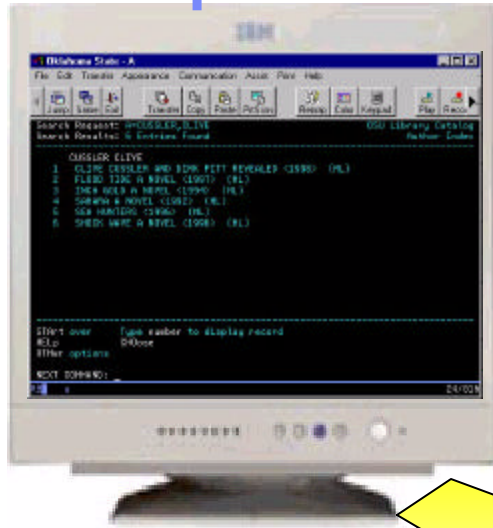
Despite the gold rush mentality on getting to the web, providing a browser interface over a heavily interactive application may not be suitable for the end user, especially when trying to exploit efficiencies by linking more closely to your customers, suppliers and trading partners. These users typically do not have experience with your application, plus have specific, targeted requests such as entering a purchase order or looking up account status. This is especially true in the business to business arena, where application to application integration and automation are important. However, organizations have invested literally billions in existing legacy applications that have been enhanced and solidified over the years. An ideal solution would be to encapsulate these robust legacy application tasks into reusable components that can be used for interactive web applications, as well as enterprise application integration projects for e-business and business to business transactions.

The basic objective of WebSphere Host Publisher is simple - enable an existing 5250 interactive application to participate in the e-business world, without having to do any code modifications. With Host Publisher, you can:

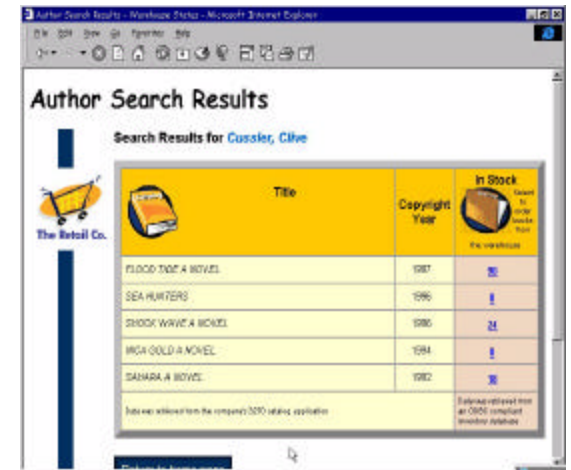
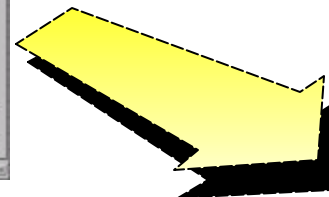
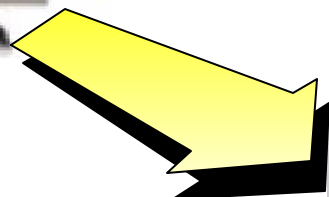
- Utilize the IBM Host Publisher product to provide a browser interface to our application
- Build a Java wrapper layer, or adapter, that provides the data conversion and session management services to interface with the Host Publisher representation of our 5250 application
- Utilize the IBM Connect for iSeries product and its Java connector option to enable an organization to participate in a business to business electronic marketplace, and leverage the strengths of our existing iSeries 5250 based order entry application

You do not need to be an expert Java programmer, or purchase expensive, inflexible middleware from a dotcom vendor that may not be in business in a few weeks, in order to enable your legacy applications to participate in e-business opportunities. You can use iSeries Client Access Family, that now includes WebSphere Host Publisher, and be confident that you have a solution that will be long lasting.

WebSphere Host Publisher



- **Browser-based access**
- **Refaces and streamlines existing green screen applications and system screens**
 - ▶ Existing green screen still available
- **Still interactive but Connections can be pooled**



Turns host applications into e-business applications for web browser users

Notes: Benefits and Business value

Benefits to Your Programming Staff:

Feature/Function

They can:

- Implement 'new look-and-feel' applications without needing host application source code
- Work with:
 - 5250/3270/VT host applications
 - Create new Database applications using a variety of JDBC drivers
 - Java Host applications
- Consolidate multiple applications into a single web application
- No programming required, you use the simple graphical wizard-like interface of Host Publisher Studio

Business value

Your Results:

- Reduces the costs and risks associated with new application development
- Since it is built on WebSphere technology it can be used other Websphere technologies to extend host data to pervasive devices like SmartPhone or personal digital assistants.
- Since it is based on open industry standards, it can be reused in other e-business applications

Benefits to Your Business:

Feature/Function

You Can:

- Put a GUI on green screens
- Provide Internet access from any browser supported by WAS
- Support new users inside and outside your enterprise
- Extend the reach of legacy applications and data
 - Streamline navigation through your applications

Business value

Your Results:

- Applications have a modern appearance
- Applications are easier to learn and use
- Lower training costs
- Better responsiveness to your customers
- More information available 24 X 7
- Costly call centers and VRU's are offloaded
- Existing transactions are streamlined

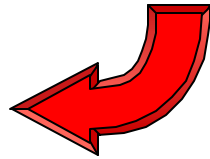
Server / Desktop Requirements...

Server / Desktop Requirements	WebSphere Host Publisher V4.0 5724-B81	WebSphere Host Publisher V3.5 5648-E25
iSeries HW	<ul style="list-style-type: none"> • Interactive 	<ul style="list-style-type: none"> • Interactive
Ports	<ul style="list-style-type: none"> • 80 (HTTP), 443 (HTTPS) 	<ul style="list-style-type: none"> • 80 (HTTP), 443 (HTTPS)
Encryption	<ul style="list-style-type: none"> • SSL in browser 	<ul style="list-style-type: none"> • SSL in browser
Browser	<ul style="list-style-type: none"> • Whatever supported by WAS (Netscape, Internet Explorer) 	<ul style="list-style-type: none"> • Whatever supported by WAS (Netscape, Internet Explorer)
Desktops supported	<ul style="list-style-type: none"> • Any O/S with supported browser -- Windows 95, 98, Me, NT, 2000, XP, Linux, AIX, UNIX, Solaris, Macintosh, OS/2 	<ul style="list-style-type: none"> • Any O/S with supported browser -- Windows 95, 98, Me, NT, 2000, Linux, AIX, UNIX, Solaris, Macintosh, OS/2

Multi-platform - server, connecting users



*Browsers
(Internet Explorer,
Netscape...)*



iSeries
pSeries
zSeries
xSeries



GUI Delivered as a
HTML



Wireless devices

WebSphere Host Publisher offers many capabilities

Extend existing applications to the Web...

1. Modernization done without source code

- Host application continues to run as it always has...

2. Can Web-enable system screens

- Including iSeries commands (such as query a database file)



3. Can take an existing full-function, in-house application and present **only selected paths** to Web users...

4. Can add database functions to existing host application

- Can access information from any relational database

5. Can combine portions of multiple panels or multiple applications into a single Web view

- ▶ 5250, 3270...

6. Includes capabilities to control heavy Web use and large networks

- ▶ Tools to enhance performance, fallover when Web server not available, manage multiple servers from single administer console

7. Cross platform development tool

- ▶ Skills invested in Host Publisher can be used with zSeries and iSeries applications as well

*This is a Mainframe Application but could just
as well been an iSeries application*

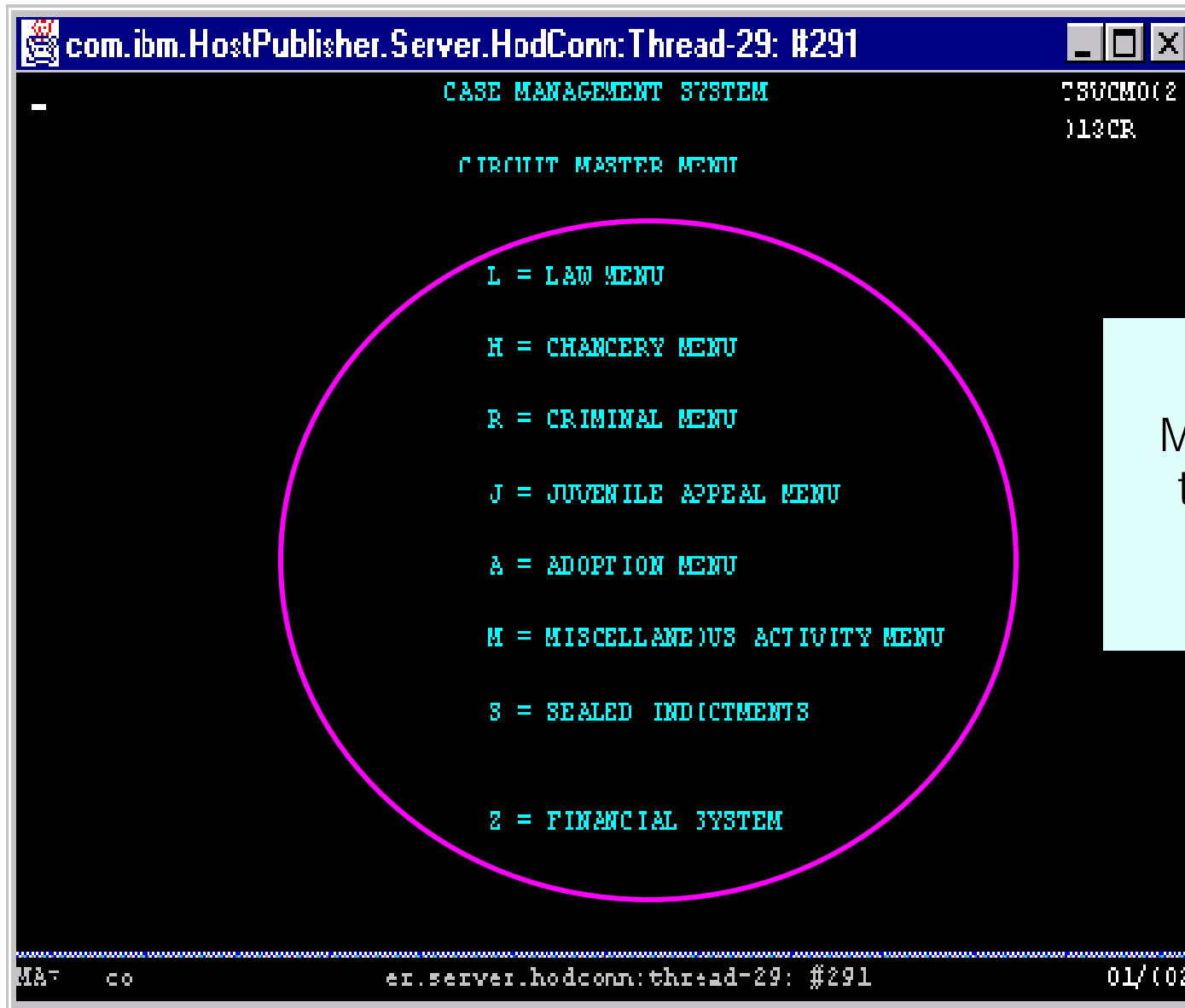
State of Virginia - Host Application

```
com.ibm.HostPublisher.Server.
C DMS/VS SECURITY SYSTEM DMXSC01
KEY YOUR SECURITY CODE 178906/19
HIT ENTER
```

- User must provide a valid Security Code in order to access this application
- This screen quite unnecessary

```
com.ibm.HostPublisher.Server.
M DMS/VS SECURITY SYSTEM
THANK YOU
CASE MANAGEMENT
SECURITY CLEARED
HIT ENTER
```

Case Management System



```
com.ibm.HostPublisher.Server.HodConn:Thread-29: #291
CASE MANAGEMENT SYSTEM
)13CR
CIRCUIT MASTER MENU

L = LAW MENU

H = CHANCERY MENU

R = CRIMINAL MENU

J = JUVENILE APPEAL MENU

A = ADOPTION MENU

M = MISCELLANEOUS ACTIVITY MENU

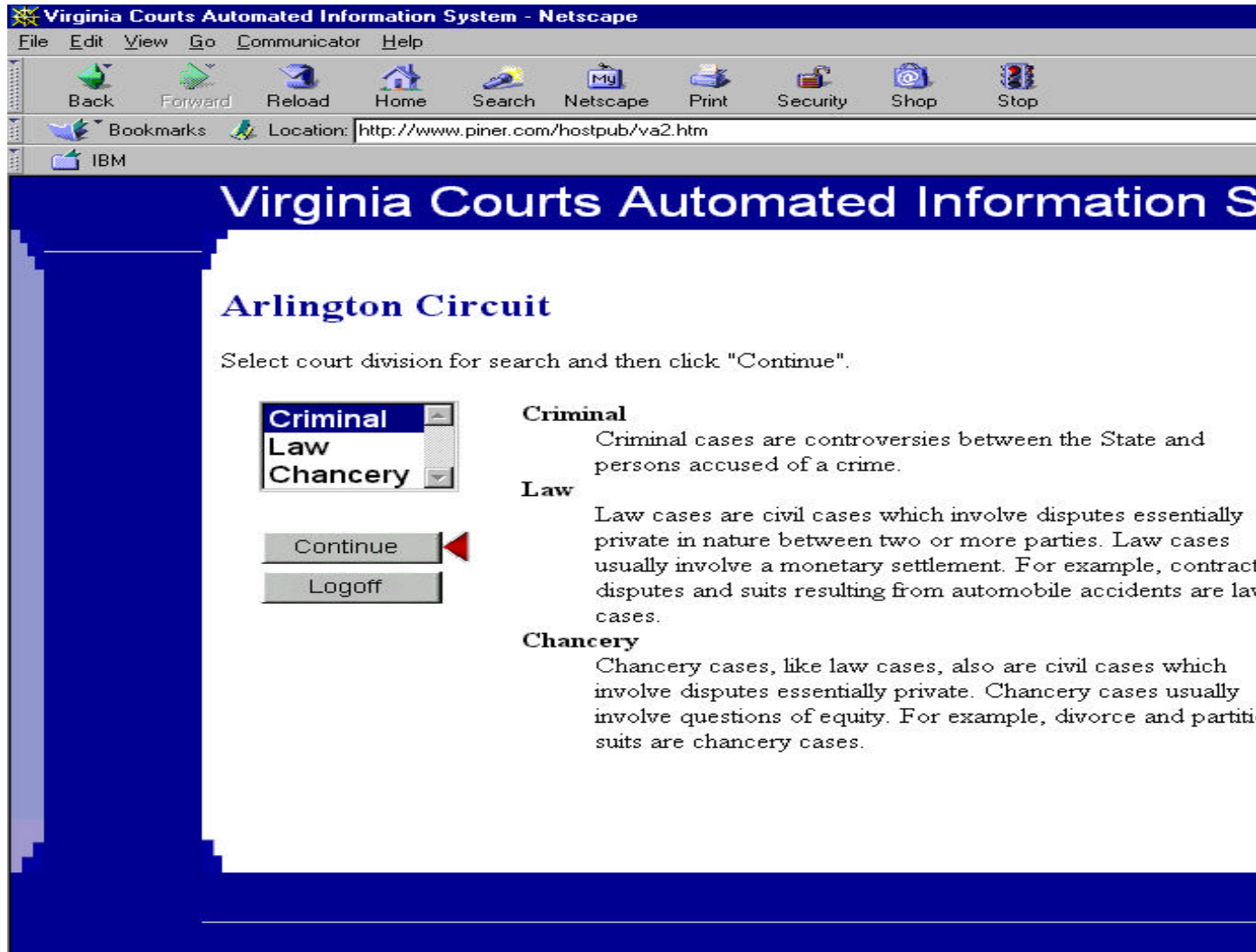
S = SEALED INDICTMENTS

Z = FINANCIAL SYSTEM

MA? co          ex.server.hodconn:thread-29: #291          01/02
```

Multiple paths
through this
application

Webized only 3 paths through this existing application



Note

Order listed changed

- From: Law, Chancery, Criminal
- To: Criminal, Law, Chancery

Several paths through application not included in this view

Check out

<http://www.piner.com> to see this application and others that have been modernized using Host Publisher

Customer Reference Application - before using Host Publisher

```

Date: 11/05/99           Time: 12:09:21
Dup No. 02 000251303 SHINGLER RAY C & SUSAN L/H&W   RIDGEWOOD CREEK
Parcel                               UNIT 1 LOT 16
Stat A Cls 510   Mtg 3604 CHIMNEY HILL CT           DR467 P61 VLACD DITCH
By/Sl  4/16/96   355 VALPARAISO           IN46383
Drain 30   Conv 2   Bk/Pg 000 000 Inst #           Tx Sale N BANKRUPT
Property Address --> NO ADDRESS FOUND           Pre.Dupl.      278560
                                           New.Dupl.      0
Land-Res   Impr-Res   Land N-R   Impr.N-R   Exempt   Net Value   C.of E.#
96         3430       20230     0           0       3000       20660     0
97         0           0         3430       20230   0         23660     0
98         0           0         3430       20230   0         23660     0
99         0           0         3430       20230   0         23660     0
Mtg        Y N N N   Hmstd Y N N N   Age      N N N N   DisVet   N N N N   Solar N N N N
Rehab      N N N N   WW1   N N N N   Blnd/dsabl N N N N   Tx Exmpt N N N N
Tax Due    Tax Paid    Date      Penalty    Pen.Paid    Date      Date Appld
96  A      793.42    793.42    5/12/97    .00         .00       0/00/00    6/03    0/00
   Y B      793.42    793.42    11/10/97    .00         .00       0/00/00    11/13   0/00
97  A      965.59    965.59    5/11/98    .00         .00       0/00/00    5/12    0/00
   Y B      965.59    965.59    11/10/98    .00         .00       0/00/00    11/18   0/00
98  A      909.92    909.92    5/10/99    .00         .00       0/00/00    5/24    0/00
   Y B      909.92    .00       0/00/00    .00         .00       0/00/00    0/00    0/00
                                           F14-C0   F16-D1           F20-SW
ENTER DUP NO           F5-NAME F7-ADDR F9-NOTES F10-PADDR F11-BK/PG F12-RTRN
    
```

Porter County Indiana - Tax Details Screen

Customer Reference Application - after using Host Publisher


Select Type of Search to perform

Search by Name:

Search by Name

Search by Address:

Search by Street Name



Search by Dup. Number:

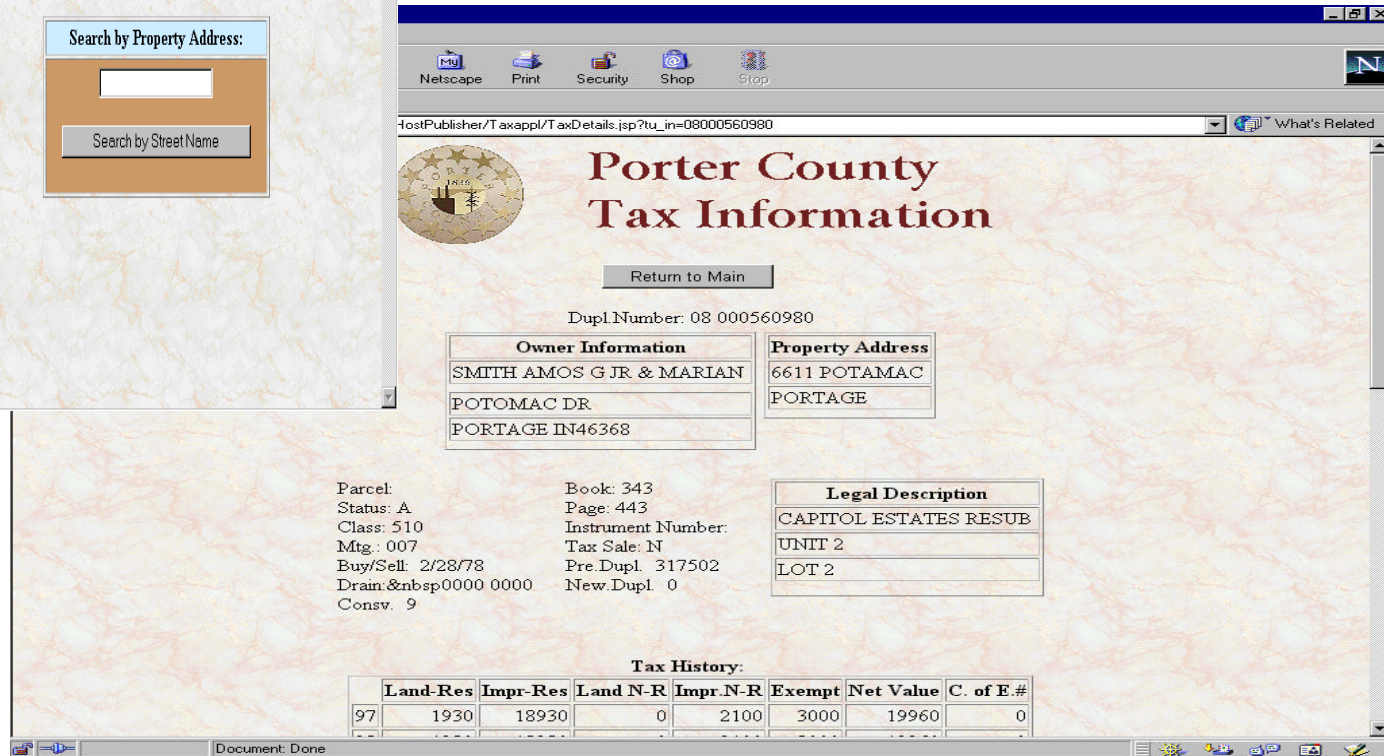
Search by Dup. No.

Search by Property Address:

Search by Street Name

Signoff

- Porter County**
- Tax Search Form
 - Tax Information Results



Return to Main

Dupl.Number: 08 000560980

Owner Information		Property Address	
SMITH AMOS G JR & MARIAN		6611 POTAMAC	
POTOMAC DR		PORTAGE	
PORTAGE IN46368			

Parcel: Status: A Class: 510 Mtg: 007 Buy/Sell: 2/28/78 Drain: 0000 0000 Conserv: 9

Book: 343 Page: 443 Instrument Number: Tax Sale: N Pre.Dupl: 317502 New.Dupl: 0

Legal Description							
CAPITOL ESTATES RESUB							
UNIT 2							
LOT 2							

Tax History:

	Land-Res	Impr-Res	Land N-R	Impr N-R	Exempt	Net Value	C. of E.#
97	1930	18930	0	2100	3000	19960	0

Customer Quote

"Porter County has experienced a strong demand to provide more convenient access to public records like tax and judicial data, and people expect the simplicity and familiarity of the web environment .

WebSphere Host Publisher provided a rapid conversion of our AS/400 property tax application to a browser interface and **allowed us to streamline the application by combining screens and functions.** The result has been a significant reduction in retrieval errors, connectivity costs, and improved public satisfaction with our systems.

We have plans in the near future to convert two additional green screen applications for web access with Host Publisher. "

Sharon Lippens, Director, Data Processing, Porter County, Indiana

Tell your customers to check out <http://www.piner.com> to see other applications that have been modernized using Host Publisher

Other iSeries Customers using Host Publisher



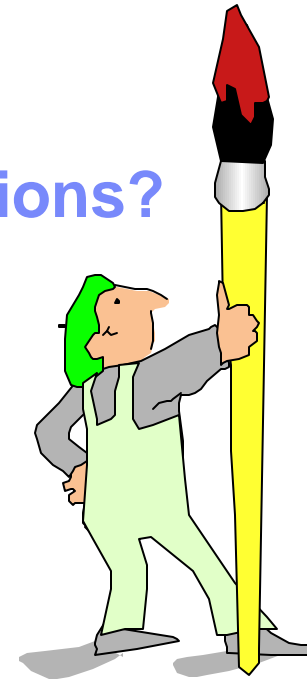
**Kawasaki Motors U.K.
supports its dealers and
sales force over the
Internet with WebSphere
Host Publisher**

**Host Publisher saves
citizens time while
enhancing government
efficiency**

Miami-Dade



How Do You Use Host Publisher to modernize your applications?



WebSphere Host Publisher

The image shows a composite of three screenshots from the IBM WebSphere Host Publisher environment. The top-left screenshot is the 'Host Publisher Studio' application, displaying a tree view of 'Object Configurations' on the left and a central workspace with instructions for working with integration objects. The top-right screenshot is the 'Host Publisher Server Administration' web interface, showing a navigation menu on the left and a main content area with an introduction to the server. The bottom-left screenshot is a web browser displaying a 'JK Toys' website with a search results table. Three yellow callout bubbles provide key features for each component.

Host Publisher Studio

- ▶ simple interface
- ▶ creates Host Integration Objects

Host Publisher Server

- ▶ Run-time for Integration Objects
- ▶ A WebSphere Application!

Wizard to create JSPs for rapid HTML views of host info

Item#	Item Name	Price
91	Mountain Pass TR-X4	200.00
92	Absolute Ascent 26	250.00
93	Crestline Ridgerunner	275.00
94	Flight Factory U2	175.00
95	MoJo Out There	175.00
96	Sierra 7	300.00
97	Sidewalk Racer 2000	150.00
98	Driveway Dragon	125.00

Notes: Host Publisher Makeup

Host Publisher is also comprised of two categories of components - development and runtime.

The development component is called the '*Host Publisher Studio*'. It is a development toolkit that contains three components:

1. Host access for interacting with 5250 application tasks (entering input, extracting output) and representing them as reuseable Java bean components
2. Database access for performing SQL inserts, updates and deletes in conjunction with DB2/400 and representing them as reuseable Java bean components
3. An interactive application builder for integrating Java components (host access beans, database access beans, or other Java applications) to build web enabled applications, using Java Server Pages (JSP)

The runtime component is call the 'Host Publisher server'. It uses WAS to provide the runtime support for Host Publisher applications. Host Publisher applications can contain multiple components (ie pieces of several 5250 applications, host screens and DB2/400 queries) from multiple servers (iSeries, mainframes, etc.), and represent these as part of a firewall-friendly, thin client HTTP- and HTML-based solution. All programming logic runs on the server, even the 5250 session management tasks. It is well suited for extending host application functionality over the Internet, without requiring the end user to download large client components or try navigating through an interactive 5250 application. Since the 5250 tasks run on the server and not the browser, you are not trying to 'force fit' a session-based protocol (TN5250) over a sessionless (HTTP) connection. This is an advantage over other HTTP-based products.

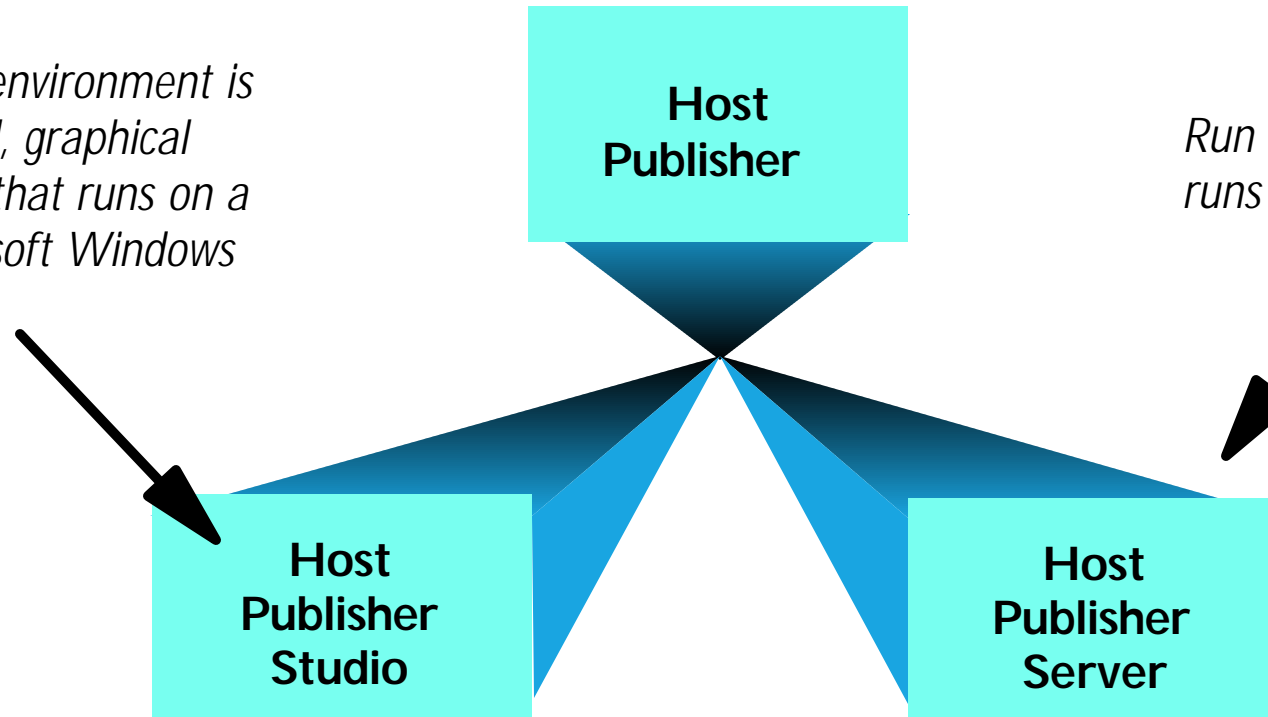
Host Publisher provides the following benefits to the iSeries environment:

- Provides Web integration with 5250, Java Database Connectivity (JDBC) and Java host applications without requiring any changes to the existing application itself.
- Allows for easy consolidation of multiple applications into a single composite application or Web page for presentation to Web users
- Includes and integrates with Websphere Application Server and Websphere Studio to provide a comprehensive solution for delivering host data to Web users and to new Websphere e-business applications.
- Works with Websphere Transcoding Publisher to extend host data to pervasive technologies such as SmartPhone devices and personal digital assistants.
- Provides a wide range of host access options: HTML to Web browsers, XML Gateway for Java applications, and reusable Host Publisher Integration Objects for Java applets and applications.
- Helps to leverage your investment in Host Publisher by using integration objects that are based on open industry standards that can be reused in new e-business applications, and reducing the costs and risks associated with new application development.
- Can be implemented without programming, using a simple graphical wizard-like interface.
- Includes IBM Network Dispatcher, which enables the balancing of user network traffic across a pool of Host Publisher servers.

Key Components

Development environment is a task-oriented, graphical user interface that runs on a PC with Microsoft Windows

Run time environment runs on WAS on iSeries



Development Environment

- ▶ Uses task oriented, graphical user interface
- ▶ Generates Integration Objects
- ▶ Contains Java bean factories
- ▶ Generates fully customizable Web pages (ie, Java Server Pages)

Run Time Environment

- Provides session management, license monitoring, run-time administration, load balancing and log and trace management
- Supports SSL encryption and DES encrypted passwords
- Supports integration with other IBM connectors

What are the steps?


- 1. Install/configure Host Publisher Server in WAS**
 - get it ready for use
- 2. Start the WebSphere Host Publisher Studio**
 - Host Access (5250, 3270, VT) or Database Access (JDBC) paths
- 3. Step through the application or host screens -- capturing the information you wish to publish**
 - generates Java beans called Integration Objects
- 4. Import the Integration Objects into the Host Publisher Application Integrator (studio)**
 - generates JSPs and J2EE.ear files
- 5. Perhaps polish your application further**
 - 5. Could use a product in the WebSphere Studio family or other products to enhance the graphical look of the pages
- 6. Install the J2EE files on the application server using WAS Administrator**
- 7. Ready for Web users to enter url to access the application**

Step 1.

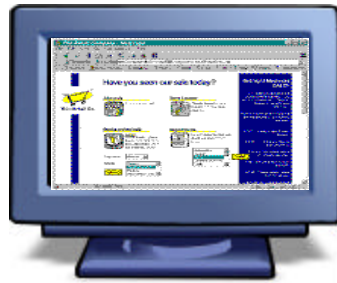
Install/configure Host Publisher Server in WAS

get it ready to use

Server Software Requirements

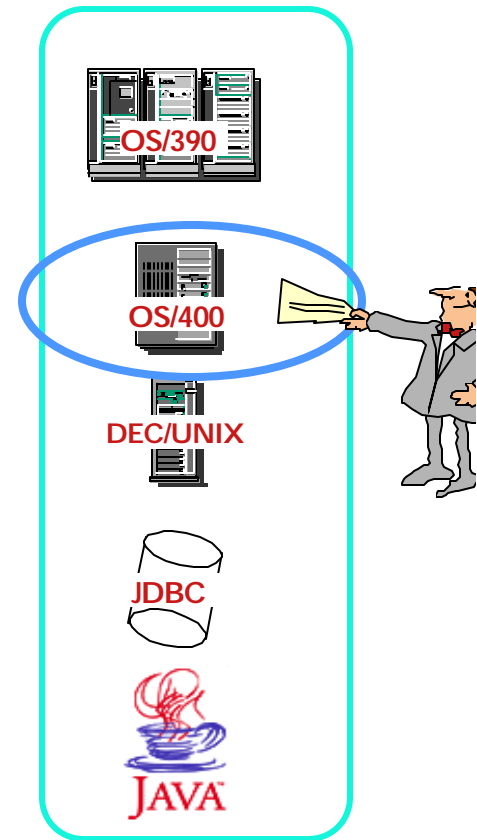
Product Number	Product Name	Option	\$
57xx-SS1	OS/400 V5R1 or later	Base	w/HW
57xx-SS1	Operating System/400 Host Servers	12	N/C
57xx-SS1	Operating System/400 Qshell Interpreter	30	N/C
57xx-SS1 57xx-AC2 or 57xx-AC3	If you plan to use Secure Sockets Layer (SSL): – OS/400 Digital Certificate Manager or – Cryptographic Access Provider (56-bit) or – Cryptographic Access Provider (128-bit)	34	N/C N/C N/C
57xx-DG1	IBM HTTP Server for iSeries		N/C
57xx-JV1	Developer Kit for Java Developer Kit for Java Version 1.2	Base 3	N/C N/C
57xx-JC1	Toolbox for Java		N/C
57xx-TC1	TCP/IP Connectivity Utilities for iSeries		N/C
57xx-XW1	iSeries Client Access Family – WebSphere Host Publisher (5648-E25, V4.0) or – WebSphere Host Publisher (5724B81, V3.5)		\$
5733-AS3 5733-WA3 5733-WS4 5733-WA4	WebSphere Application Server - Standard Edition V3.5 WebSphere Application Server - Advanced Edition V3.5 WebSphere Application Server - Advanced Single V4.0 WebSphere Application Server - Advanced Multi V4.0		N/C \$ \$ \$
	 Will support WAS 5.0 versions by 6/30/2003		

Host Publisher Ts & Cs



WebSphere Host Publisher is included with iSeries Access Family (5722-XW1):

- **Production environment must be installed on iSeries servers**
- **Does 'Concurrent' license checking at runtime**
 - Must have iSeries Access Licensed Program Product (5722-XW1) installed on Server.
 - If you have a Processor-based license of 5722-XW1, unlimited number of users could be using Host Publisher, Access for Web Access, and Access for Windows products simultaneously



What Comes in Your Package...

WebSphere Host Publisher Server - CD

- ▶ To be installed on iSeries
- ▶ Host Publisher documentation included on CD
 - Planning and Installation Guide for iSeries
 - Administrator's and User's Guide.

WebSphere Host Publisher Studio - CD

- ▶ To be installed on Windows 98, Me, NT 4.0, 2000, or XP

Use this for
Host
Publisher
too



Also look at iSeries Access for Web Installation Guide (SC41-5518) and README for additional information on installing and configuring WebSphere Host Publisher.

Performance Considerations

Performance mainly dependent on WebSphere Application Server

- Minimal network traffic as only generating HTML page
- Run the workload estimator at:
 - <http://www-912.ibm.com/supporthome.nsf/document/16533356>

Also look at recommended minimum system requirements for WebSphere from above web page

Use First Customer Assist Program to get WAS configured and running

- <http://www-919.ibm.com/servers/eserver/series/developer/websphere/assistance.html>

Notes: First Install Customer Assistance

First Install Customer Assistance for **Websphere Application Server** Standard or Advanced Edition for iSeries or AS/400.

- We would like to welcome new customers to the Websphere arena and provide them with assistance that may be needed to install and configure Websphere Application Server, either Standard or Advanced Edition.
- By starting with a working instance of Websphere Application Server and reviewing the sample programs provided, your time spent with Websphere Application Server will be more productive and enjoyable.
- Through your application and acceptance into this program, the Rochester Support Center will provide you with 8:00AM - 5:00PM Central Standard Time phone support assistance in setting up a Websphere Application Server test environment.

This assistance includes:

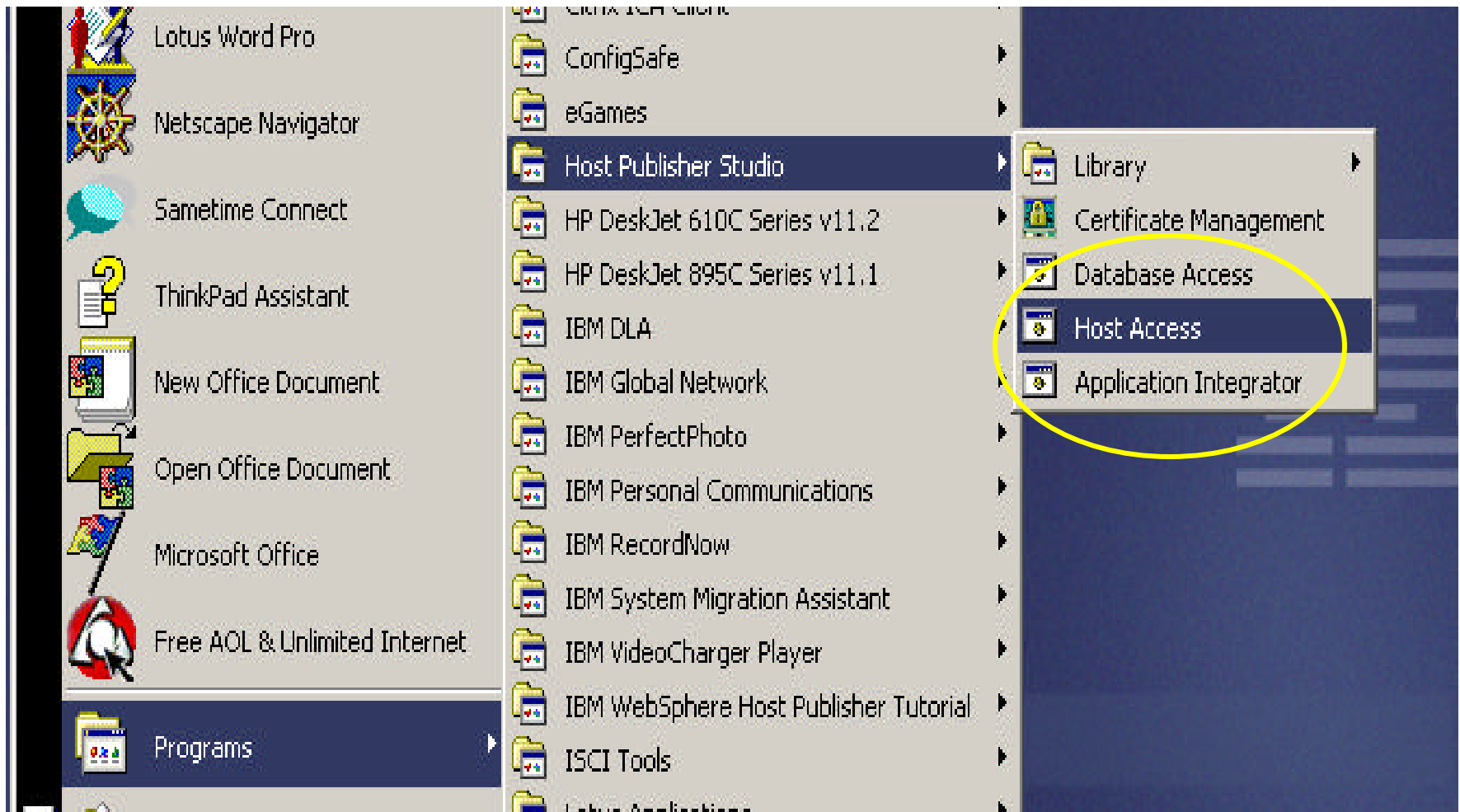
1. Documentation clarification
2. Verify you have all Prerequisites available: Software, Hardware, PTF's, and Communication configurations
3. Creation of a default Websphere instance
4. Configuration and enablement of Websphere for an HTTP server
5. Installation and use of Websphere Client based Admin Console (excluded Firewall configuration)
6. Validate the above by running of a sample servlet.

<http://www.iseries.ibm.com/developer/websphere/assistance.html>

Steps 2-4. Working with the Studio

2. **Start the WebSphere Host Publisher Studio**
 - Host Access (5250, 3270, VT) or Database Access (JDBC) paths
3. **Step through the application or host screens -- capturing the information you wish to publish**
 - generates Java beans called Integration Objects
4. **Import the Integration Objects into the Host Publisher Application Integrator (studio)**
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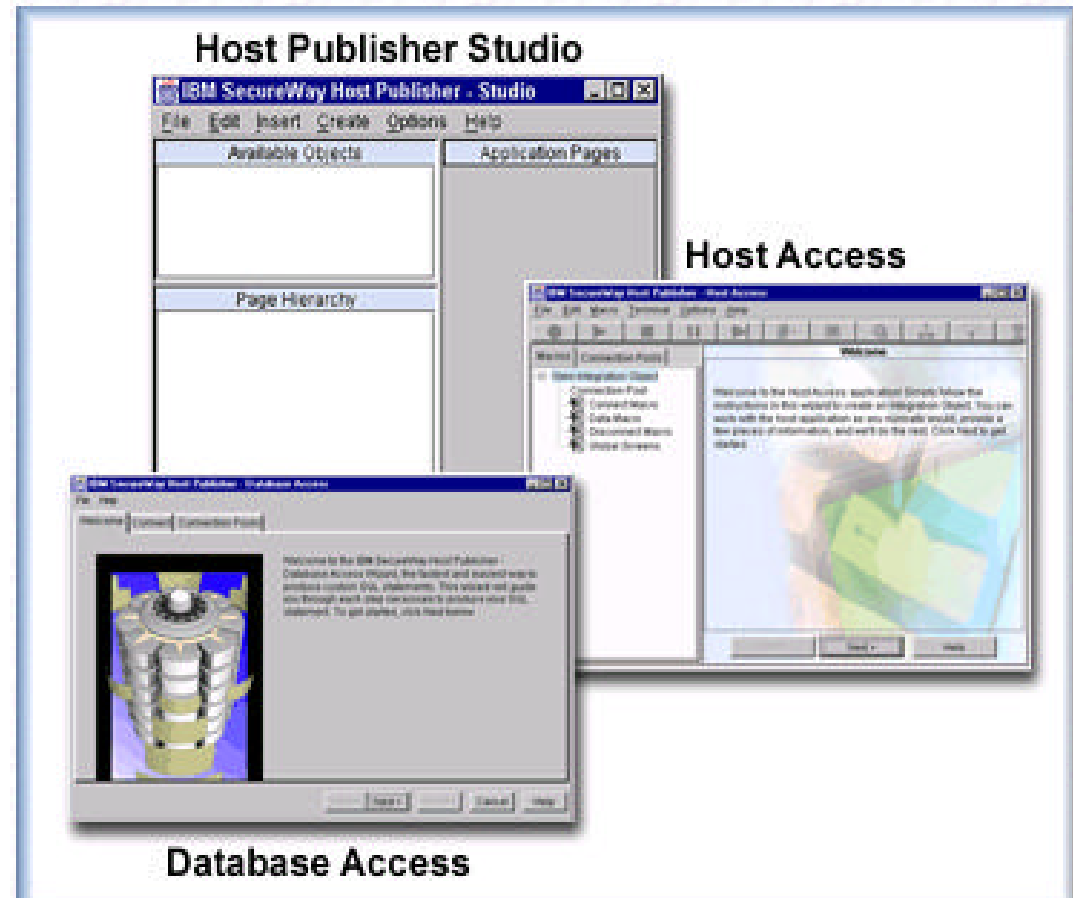
WebSphere Host Publisher Studio



Development Environment Components

Host Publisher Studio is divided into 3 parts for creating and managing a project

1. **'Host Access'** for your existing 5250 applications
 - Generates JavaBeans called **Integration Objects**
2. **'Database Access'** is used to create new SQL requests
 - Generates **SQL Integration Objects**
3. **'Host Publisher Studio' / 'Application Integrator'**
 - Generates HTML, JSPs, and J2EE.ear files

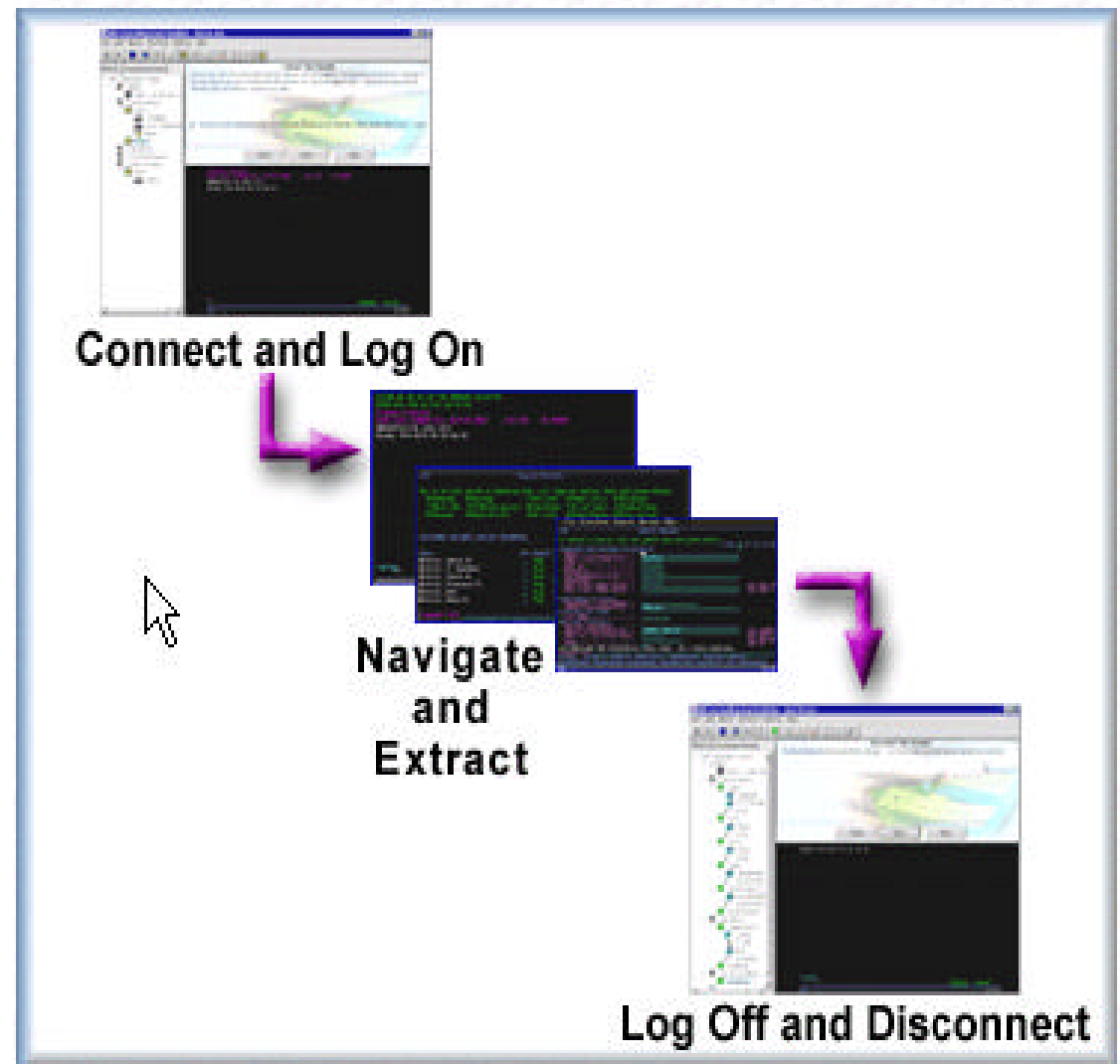


Notes: Working through the phases...

There are three unique steps you go through when using the 'Host Access' or 'Database Access' functions

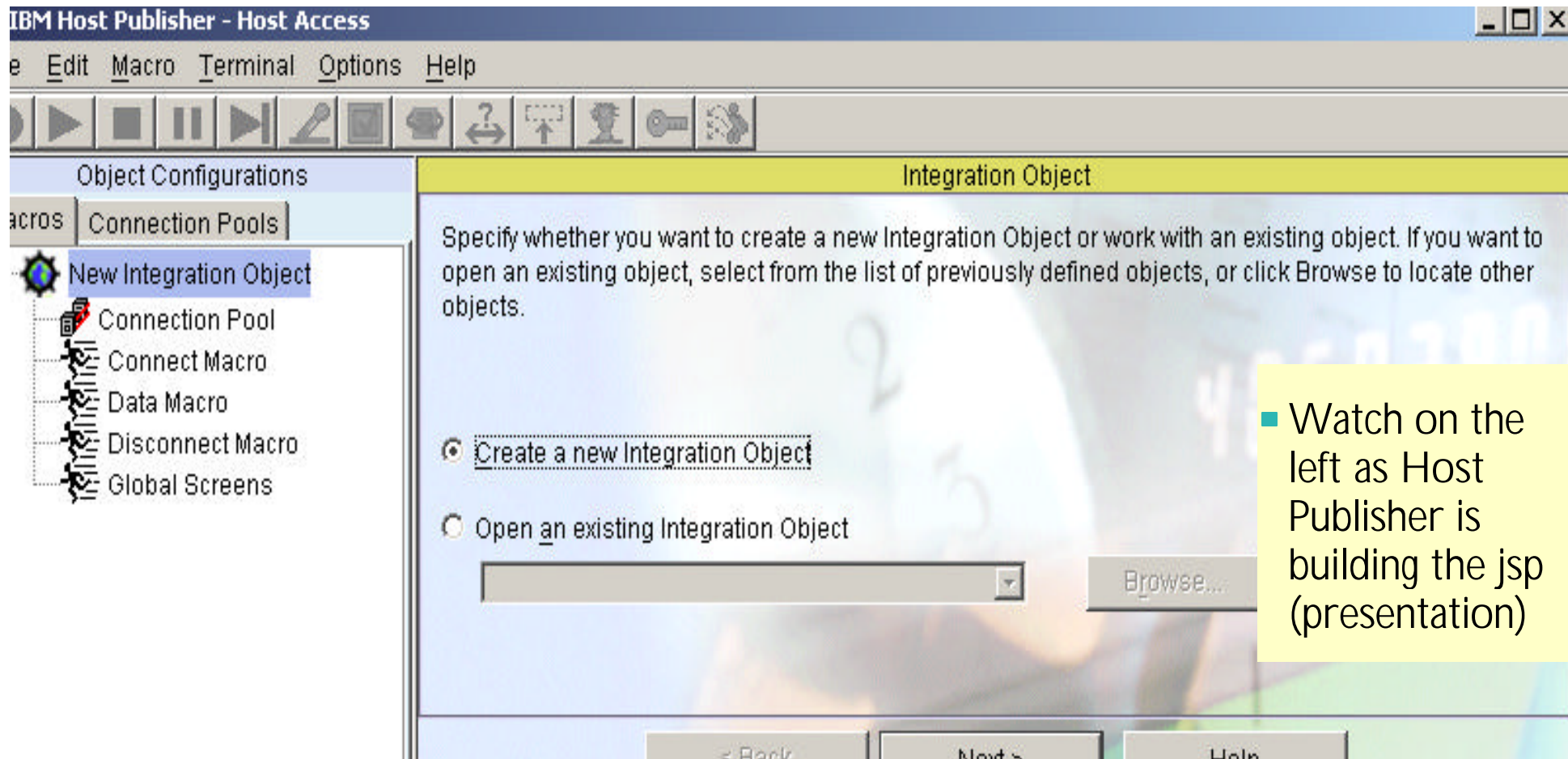
These phases become your interaction macros

1. Connect and log on
2. Navigate and extract data
3. Log off and disconnect



Working with 'Host Access'...

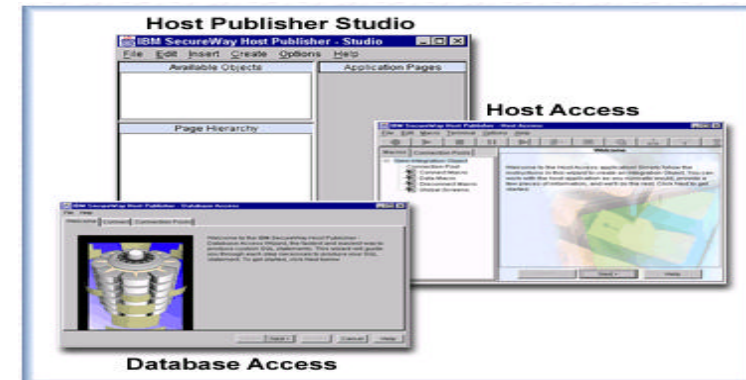
- To work with an existing 5250 application
- We start by selecting 'Host Access' and start working through the Wizards.
 - ▶ First we define what we're going to do...



- Watch on the left as Host Publisher is building the jsp (presentation)

Notes: Host Access

The 'Host Access' component works with existing 5250, 3270, and VT applications or host screens to provide data and functions in a web page



Host Access interacts with host tasks

- Host 'green screen' applications or system screens (ie, OS/400 screens such as working with spool file)
- Entering input, extracting output
- Represents them as reuseable Java bean components
- Data from multiple host applications or system screens can be combined in a single web page

Benefits

- Host Publisher hides the complexity of obtaining the data
- No changes to host applications needed!
- Mission critical data can be presented to new users in new ways

Capturing your screens...

- Step through your application
- Picking the input/output fields you want to display
- Look on left now...

Telling Host Publisher what fields you want to present...

```

Date: 11/05/99 Time: 12:09:21
Dup No. 02 000251306 SHINGLER RAY C & SUSAN L/H&W RIDGEWOOD CREEK
Parcel UNIT 1 LOT 16
Stat A Cls 510 Mtg 3604 CHIMNEY HILL CT DR467 P61 VLACD DITCH
By/SI 4/16/96 355 VALPARAISO TN46383
Drain 30 Conv 2 Bk/Pg 000 000 Inst # Tax Sale N BANKRUPT
Property Address --> NO ADDRESS FOUND Pre.Dupl. 278560

```

	Land-Res	Impr-Res	Land N-R	Impr.N-R	Exempt	Net Value	C. of E.#
96	3430	20230	0	0	3000	20660	0
97	0	0	3430	20230	0	23660	0
98	0	0	3430	20230	0	23660	0
99	0	0	3430	20230	0	23660	0

```

Mtg Y N N N Hmstd Y N N N Age N N N N DisVet N N N N Solar N N N N
Rehab N N N N Ww1 N N N N Blnd/d abl N N N N Tx Exmpt N N N N
Tax Due Tax Paid Date Penalty Pen.Paid Date Date Appld
96 A 793.42 793.42 5/12/97 .00 .00 0/00/00 6/03 0/00
Y B 793.42 793.42 11/10/97 .00 .00 0/00/00 11/13 0/00
97 A 965.59 965.59 5/11/98 .00 .00 0/00/00 5/12 0/00
Y B 965.59 965.59 11/10/98 .00 .00 0/00/00 11/18 0/00
98 A 909.92 909.92 5/10/99 .00 .00 0/00/00 5/24 0/00
Y B 909.92 .00 0/00/00 .00 .00 0/00/00 0/00 0/00

```

F14-C0 F16-D1 F20-SU

Porter County Tax Information

Dupl Number: 25 000036200

Owner Information	Property Address
WILSON ALICE	306 IROQUOIS TR BH
306 IROQUOIS TR BH	CHESTERTON
CHESTERTON IN46304	

Parcel	Book: 000	Legal Description
Status: A	Page: 000	INDIAN SPRINGS
Class: 510	Instrument Number:	LOT 28
Mtg: 999	Tax Sale: N	
Buy/Sell: 0/00/00	Pre Dupl: 0	
Drain:	New Dupl: 0	
Conv: 9		

Land-Res	Impr-Res	Land N-R	Impr.N-R	Exempt	Net Value	C. of E.#	
96	1870	9370	0	0	3000	8240	0
97	1870	9370	0	0	3000	8240	0
98	1870	9370	0	0	3000	8240	0
99	1870	9370	0	0	4000	7240	0



Remember that Porter County Application?

Working through the studio wizards...

The screenshot shows the IBM Host Publisher - Host Access application. The left pane displays a tree view of macro configurations under 'Ws_simple_boats'. The right pane shows a terminal window with the following text:

```

AS/400 OS/2 Boat Demo          4/26/02 11:55:39

Your search parameters
Type          A      P=Powered, S=Sailing, T=Tug, C=Commercial, A=All
Length (feet)          feet to start from
Year built            year to start from

24 boats match your search

l=Details:
Type and Model          Feet   Year      US$
-----
- A Hangar                20    1940     100,000,000
- A Spandau               72    2000     100,000,000
- A MOLSLINIEM          300    1999     100,000,000
- A Spandau              720    1999     100,000,000
- C Poole Boat Co Aluminum  80    1979      1,000,000
- P Mako Sportfisher      19    1989       13,000
- P Carver Santa Cruz     28    1978      23,900
- P Monk Flybridge/Sedan  34    1985
- P Monk Bridge-deck Cruiser 36    1956       19,900
- P Monterey Marine Custom 80    1996     2,375,000
More ...

F3=End F12=New search
  
```

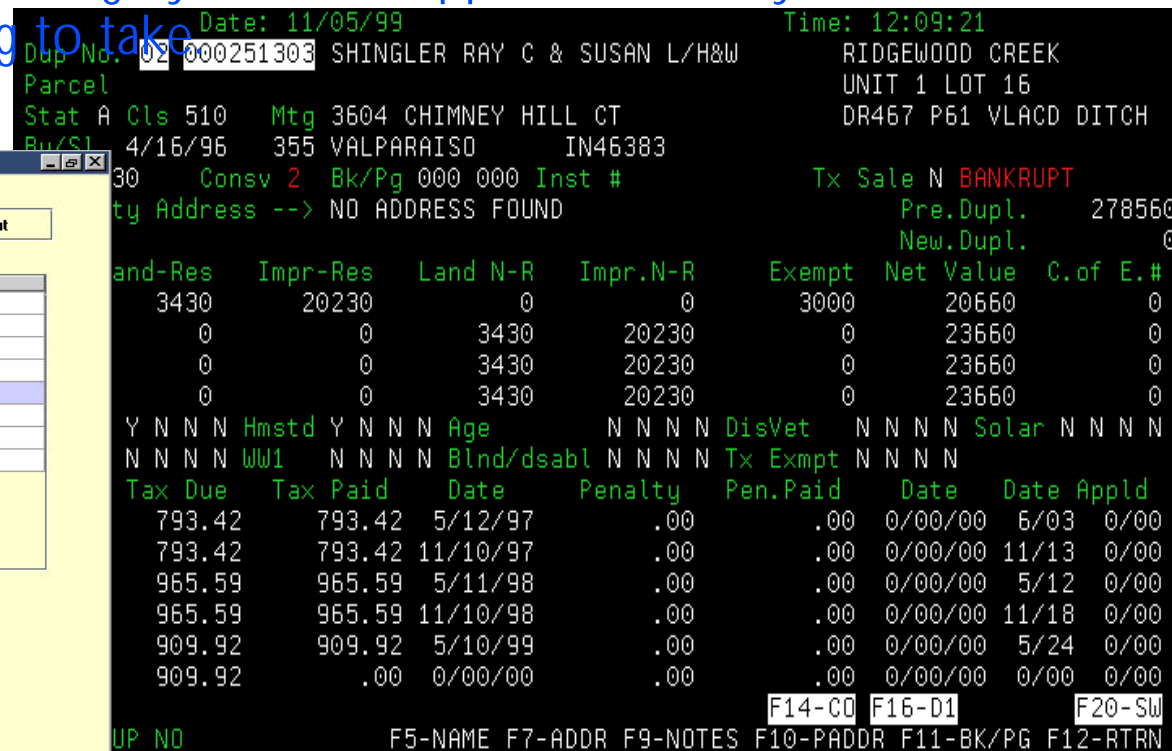
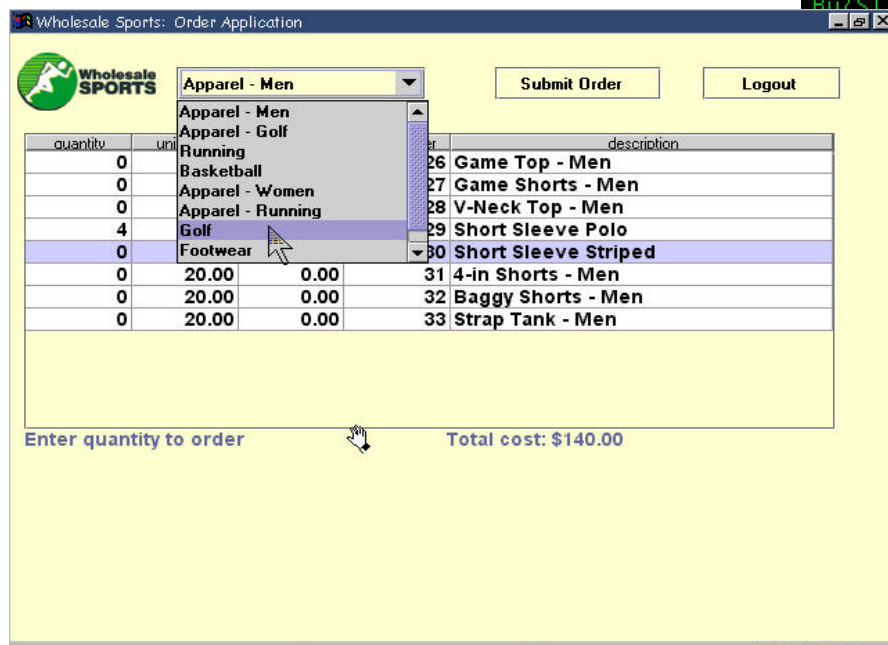
- Continuing through the 5250 application
- Identifying what you want to display...
- Look at left side now...

F03SP22HostPublisherV4.prz

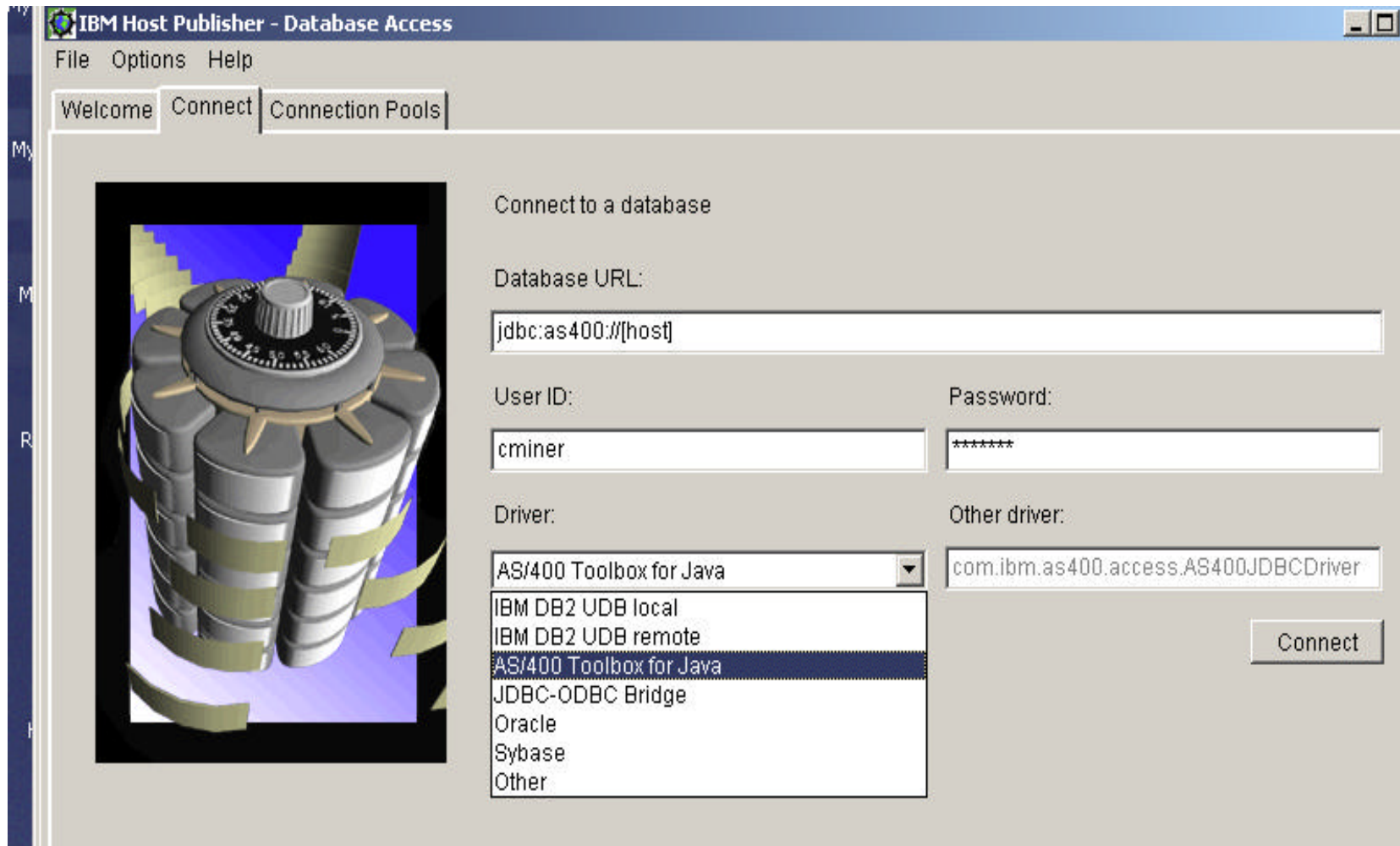
Testing and Debugging your web application...

You can use the Host Publisher Display Terminal function for debugging

- You can run the 5250 application in its green-screen view right next to your modernized application
- Enables you to see the paths through your 5250 application that your modernized application is going to take

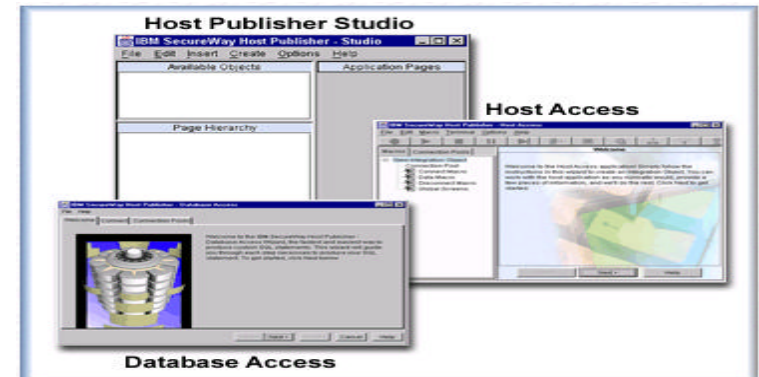


Database Access - select JDBC driver



Notes: Database Access

The 'Database Access' wizards are used to create SQL Integration Objects that can access relational databases



Includes:

- iSeries JDBC driver
- AS/400 Toolbox for Java

The 'Database Access' component is used to create Integration Objects that can access databases

- Supports **any relational database** that provides **JDBC drivers**
- Can access DBA data over the network using JDBC driver in DBA Connect

Database Access enables you to:

- Perform SQL inserts, updates and deletes in conjunction with DB2 UDB for iSeries, and
- Represent them as reuseable Java bean components

Now use Database Access wizards to built database application...

IBM Host Publisher - Database Access

File Options Help

Welcome Connect Connection Pools

Welcome to the IBM Host Publisher - Database Access Wizard, the fastest and easiest way to produce custom SQL statements. This wizard will guide you through each step necessary to produce your SQL statement. To get started, click Next below.

- Wizard builds SQL statements
 - Tables
 - Join
 - Condition
 - Columns
 - Sort
 - SQL
 - Insert
 - Update

Notes: Using Database Access wizards

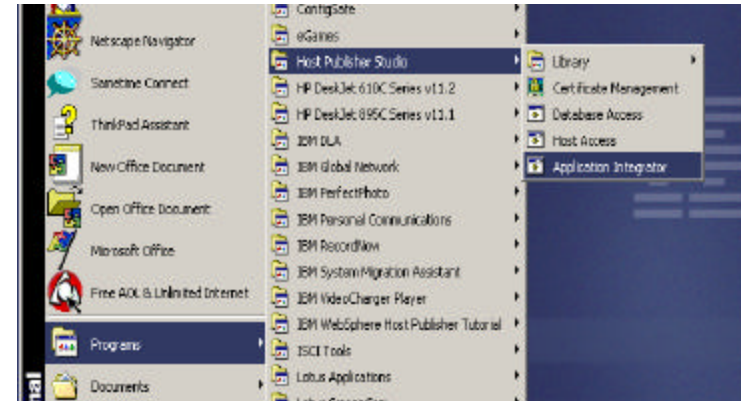
The Database Access application enables you to create an 'Integration Object' that encapsulates a database statement. This Integration Objects are reusable building blocks you can use to build Web pages in Host Publisher Studio or your own server-side Java components such as servlets or Enterprise Java Beans.

The Database Access application provides a wizard interface that enables you to quickly create, modify, and run Structured Query Language (SQL) statements. With the wizard, you can query a relational database to retrieve data from the tables in the database, or update or remove a database entry. You do not need to know SQL syntax to complete the wizard. Tabs guide you through the process of building and executing a valid SQL statement. You can navigate by clicking a tab at the top of the window or Back or Next at the bottom of the window. Click Finish to save the Integration Object with the information you have typed. Finish displays a save dialog box for you to specify a name for the Integration Object. If you did not specify a User ID on the Connection Pools tab, the User ID Warning dialog box reminds you that the field is empty, which may cause an error at runtime. Finish is enabled when you have connected to a database and selected the tables to access on the 'Tables' tab.

Before you start, ensure that the database client software is installed and configured on your workstation. Specify the Java database connectivity (JDBC) address for the database. The format of the database address depends on the JDBC driver you use to connect to the database. If you select one of the JDBC drivers from the drop-down list in the Driver field, the required format for the driver is displayed in the Database URL field. For example, the AS/400 Toolbox for Java JDBC driver requires **`jdbc:as400://[host]`**, where *host* is the fully-qualified network name of the database host. The square brackets ([and]) surrounding the *host* and *database* variables must be removed from the syntax when you enter the variable value.

Host Publisher Studio - Application Integrator

The 'Application Integrator' component is used to build Java Server Pages (JSPs) and J2EE.ear files



The '**Application Integrator**' component is an interactive application builder for integrating Java components

- Host access beans
- Database access beans
- Used to build composite applications
 - ▶ Java beans and objects to be combined with other back-end data sources to create a composite Web application
 - Java is presented as a consolidated application
 - Allows for the publication of any Java bean or object to the Web
 - Facilitates interaction with that object

Skills / Education



Skills

Skills you need to use Host Publisher

- You **must be proficient** with the host application or database
- You will use the Host Publisher Studio wizards to create java objects
 - **Do not need to be a Java programmer**
- You will use the Host Publisher Studio wizards to build Web pages for the applications
 - **Basic JSP knowledge is required to modify the applications**



Host Publisher Studio provides the tools to develop web-enabled applications

Skills for building a Web application...

You need to understand the data source well enough to model interactions with the data source (which may be a complex process)

- You need to be able to predict all possible paths, including error paths
- If you are not familiar with the data source, then building the Integration Objects may be a painful exercise with much time spent starting over

You build and test the Integration Objects within the Host Publisher Access User Interface first. You:

- **Model tasks, not screens**
- Identify tasks to be performed
- Build a flow diagram and exercise the diagram
- Allow for error paths (or prevent them effectively)
- Allow for global screens (screens which could appear at any time)

You build pages to complete the application and TEST

- You can customize pages to suit standards.
- Once the application has been thoroughly exercised and tested, you then save the customization of the JSP pages

Notes: Host Publisher Sample Programs

The Host Publisher Studio allows you to import the integration object created from the 5250 application example, and define a web browser interface for entering the input data, and receiving the output. As with the host access toolkit, the studio provides an interactive wizard that helps you get started quickly. It is important to reiterate that you do not change the original application and you don't even need access to the OS/400 display file source.

If you can write your own applications using the beans or HACL interface directly gives you a great deal of control, however it requires utilizing some fairly low-level programming techniques. It also requires developers to handle situations (such as screen recognition and waiting for the session's input inhibited indicator to clear) before processing the next step. To avoid having to do this tedious coding, Host Publisher gives you a much easier means of interacting with the 5250 application, and it creates Java bean components that you can then utilize in your own application development tools, such as IBM VisualAge for Java. Host Publisher is often more than adequate for building the appropriate solution. For more demanding application requirements, one can import these integration objects into a full-fledged Java IDE such as VisualAge and build solutions.

See the simple example *Building A Java Adapter Over a 5250 Application to enable B-B transactions at* <http://www.iseries.ibm.com/developer/java/topics/hostpubadapter.html> that shows an example of taking an interactive 5250 application, then introduces you to 'web enabling' it via the Host Publisher product. Next, you will use this web integration infrastructure to create what is commonly termed as an adapter. Put simply, an adapter is analogous to a human translator that provides interpretation between people that do not speak a common language. In this case, the Java adapter understands the interactive 5250 application transaction flow and structure of the input and output data. The adapter also understands a Java runtime environment direct program call. This allows applications such as Connect for iSeries to take advantage of the robust, well-tested 5250 order entry application infrastructure running on an iSeries machine, and make it accessible via a web browser. For interactive, browser-based applications.

Host Publisher - Education

IBM WebSphere Host Publisher Application Development Workshop



- **Course Code: SW910**
- **For schedule information, call 1-800-IBM-TEACH (426-8322)**

'Building A Java Adapter Over a 5250 Application to enable B-B transactions' article

- **An example of taking an interactive 5250 order entry application running on an iSeries machine, and making it accessible via a web browser**

<http://www.iseries.ibm.com/developer/java/topics/hostpubadapter.html>

Programmer's Guide

- **On Host Publisher Studio CD**

Assistance

- **eServer Custom Technology Center (CTC)**

Tutorial on CD

- **Contact Carole Miner for copy**

Notes: Host Publisher Education

IBM WebSphere Host Publisher Application Development Workshop (Course Code: SW910) -

this course is for anyone that wants to build Host Publisher applications across a variety of platforms (not just iSeries) and who has basic web application development skills including HTML knowledge and an understanding of the Java programming Language. The focus of this course is on implementing IBM Websphere Host Publisher (Host Publisher) applications using advanced techniques designed to handle a wide variety of application scenarios. Advanced topics will be discussed to give the student in-depth understanding of Host Publisher technology and how to apply this technology to real-world applications. Labs will be used extensively to ensure students can apply the topics discussed. The Host Publisher Application Development Workshop is a technical workshop that will discuss techniques for developing advanced Host Publisher applications.

Duration: 4 Days

Delivery Method: Classroom

Skill Level: Basic

Tuition: \$2200

For schedule information, please call 1-800-IBM-TEACH (426-8322).

Reference Material (Redbooks, manuals, whitepapers, etc.)

<http://www.ibm.com/software/webservers/hostpublisher/library.html>

Redbooks

- iSeries Access for Web V5R2 and WebSphere Host Publisher V4.0, SG24-6804-00 on the web at:
<http://publib-b.boulder.ibm.com/cgi-bin/searchsite.cgi?query=SG24-6804>
- A Comprehensive Guide to IBM WebSphere Host Publisher V3.5, SG24-6281
- New Advanced Functions in IBM WebSphere Host Publisher V2.2: Access Host Applications from Web Devices, SG24-5964-00
- New Advanced Functions in IBM WebSphere Host Publisher V2.2 - Access Host Applications from Web devices, SG24-5964-00
- Building Integration Objects With IBM SecureWay Host Publisher Version 2.1 , SG24-5385-00

White papers

- IBM WebSphere Host Publisher Version 4.0 Implementation Guide
- ssRTE.exe for use with Lab 1 in Implementation Guide [Executable - 139 KB]
- Setting up and Using the IBM® Express Logon Feature for WebSphere Host Publisher 3.5
- IBM WebSphere Host Publisher Version 3.5 Implementation Guide
- IBM WebSphere Host Publisher [PDF Version- 200KB]
- Using WebSphere Studio with Host Publisher
- Designing an Application Using IBM WebSphere Host Publisher
- Understanding Host Publisher Integration Object Chaining

Product documentation

- IBM Websphere Host Publisher V4.0 Readme
- IBM WebSphere Host Publisher V4.0 Administrator's and User's Guide
- IBM WebSphere Host Publisher V4.0 Programmer's Guide and Reference
- IBM WebSphere Host Publisher V4.0 Messages Reference
- IBM WebSphere Host Publisher V4.0 Planning and Installation G for IBM AIX, Sun Solaris, and Microsoft Windows
- WebSphere Host Publisher V3.5 Application Development: Built Integration Objects for use in Java Server Pages: Lab 1
- WebSphere Host Publisher V3.5 Application Development: Built a Integration Object Chaining Application- Lab 2
- WebSphere Host Publisher V3.5 Application Development: Using Conditional Macros, Error Logic and Global screens - Lab 3
- IBM Websphere Host Publisher V3.5 Readme
- IBM WebSphere Host Publisher V3.5 Administrator and User's Guide (GC31-8728-02)
- IBM WebSphere Host Publisher V3.5 Programmer's Guide and Reference
- IBM WebSphere Host Publisher V3.5 Planning and Installation G for Windows NT, Windows 2000, AIX, and Solaris (SC31-8730-03)
- IBM WebSphere Host Publisher V3.5 Planning and Installation G for iSeries (SC31-8734-03)

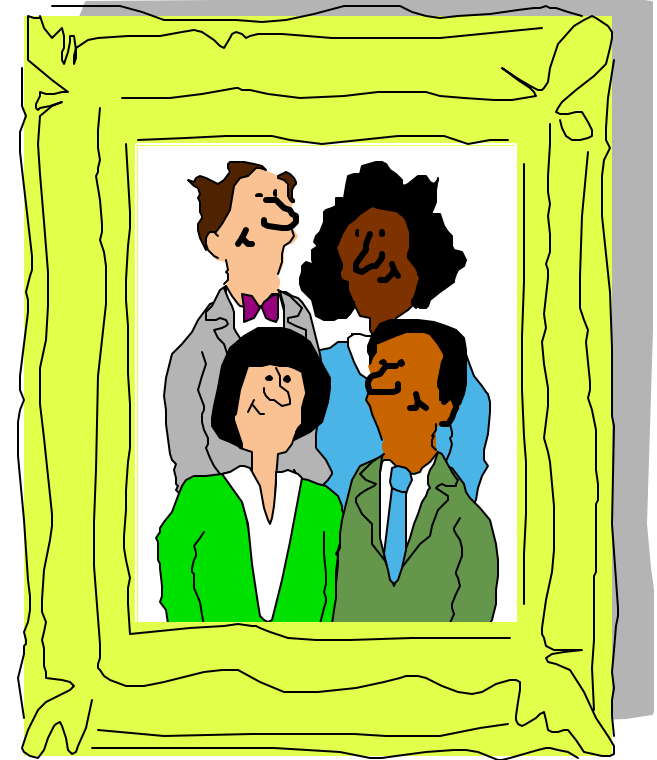
Key informational websites or links

- iSeries Access Family: www.ibm.com/eserver/series/access
- Host Publisher: www.ibm.com/software/webservers/hostpublish

pretty as a picture...

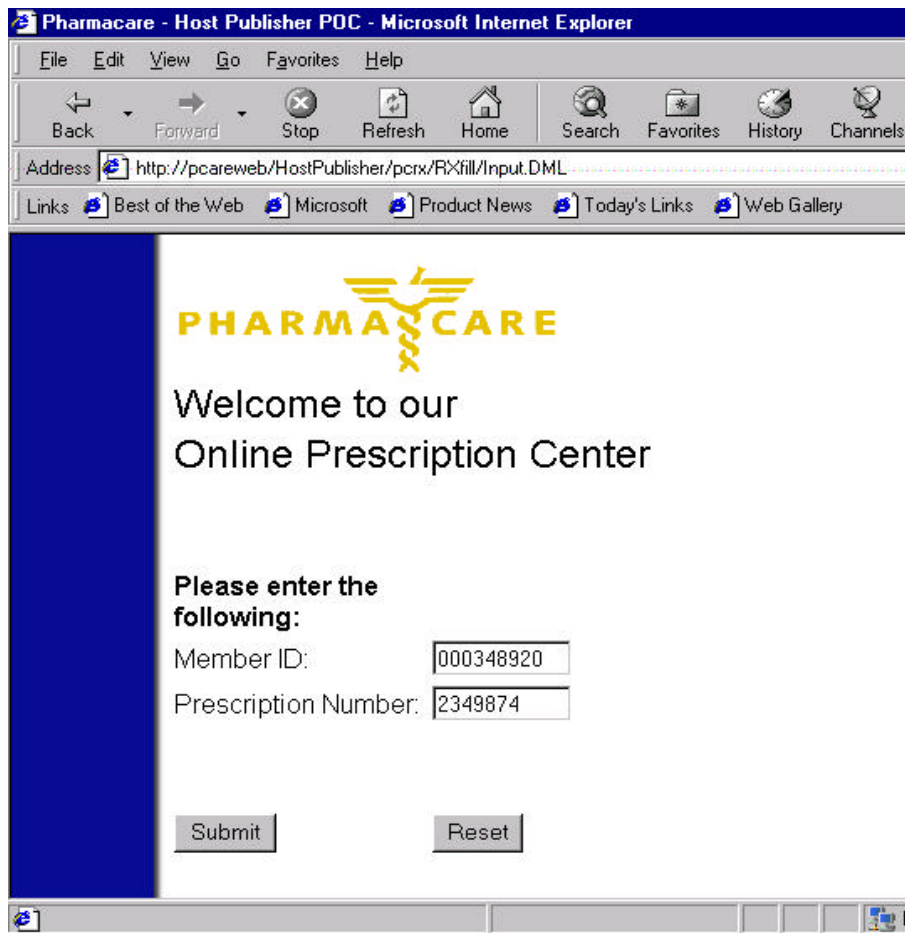
Step 5. Perhaps polish your application further

Could use a product in the WebSphere Studio family or other products to enhance the graphical look of the pages



First we use the Host Publisher Studio to create our basic Web-to-host application, then we make it 'production ready'

To get this kind of look takes an extra step...



- You will want to use a product like IBM's **WebSphere Studio products** to enhance the presentation of the application

Notes: Managing Host Publisher Studio-generated JSPs in WebSphere Studio

The following steps describe how to import Host Publisher generated JavaServer pages (JSPs) into WebSphere Studio

Create the application with Host Publisher Studio

1. Install sample application UofMApp1.hpa Note: UofMApp1 and UofMApp2 are installed together, so you can skip this step if UofMApp2 is already installed.
2. Start Host Publisher Studio from the Start menu.
3. Close the opening Welcome to Host Publisher Studio! dialog box, if it appears.
4. Open the sample application as follows:
 1. From the menu bar, select File > Open Application....
 2. Double-click the UofMApp1 folder in the Open Application File dialog box.
 3. Select UofMApp1.hpa.
 4. Click Open.
5. Click File > Transfer to Server... to transfer the sample application to the Host Publisher Server. Refer to the IBM WebSphere Host Publisher Administrator's and User's Guide for details.
6. Use Host Publisher Server Administration to deploy UofMApp1. This final step makes the application available on the Web.

Import the JSPs into your WebSphere Studio project

7. Start WebSphere Studio from the Start menu.
8. Select Create a new project from the Welcome to IBM WebSphere Studio dialog box. If this dialog box does not appear, click File > New Project... from the menu bar.
9. Type UofM1 as the Project Name, then click OK.
10. Import the Host Publisher Studio-generated JSPs as follows:
 1. From the menu bar, select Insert > File....
 2. Select the Use Existing tab in the Insert File dialog box.
 3. Click Browse and navigate to the x:\HostPub\Studio\UofMApp1 folder.
 4. Press and hold Ctrl, then click inputPage.jsp and outputPage.jsp to select them both.
 5. Click Open, then click OK.

Modify the JavaServer Pages within WebSphere Studio

11. Double-click inputPage.jsp in the File View window to open Page Designer with the selected file.
12. Apply your creativity to enhance the page. When you are done, click File > Save to save the revised file, then click File > Quit to close Page Designer.
13. Repeat the process to enhance outputPage.jsp as desired.

Publish the modified JSPs from WebSphere Studio to Host Publisher Server

Note: Your publishing target must be a Host Publisher Server.

14. Configure WebSphere Studio to publish the JSPs to the correct Host Publisher Server application directory as follows:
 1. Select the Publishing window and expand the publishing stage with which you are working.
 2. Right-click on the server and select Properties from the pop-up menu.
 3. Click Targets... in the Properties dialog box.
 4. Set the html target to the corresponding application directory on your Host Publisher Server target (for example, x:\HostPub\Server\production\documents\UofMApp1).
 5. Click OK to close the Properties dialog boxes.
15. Configure WebSphere Studio to publish files with relative links:
 1. From the menu bar, select Tools > Publishing Options....
 2. Check Relative to parent file for Style of links.
 3. Click OK to close the Publishing Options dialog box.
16. Publish your WebSphere Studio project. Note that you may see warnings about broken child links in inputPage.jsp and outputPage.jsp. You can safely ignore these warnings and click OK in the Files to publish dialog box. The warnings can be ignored because your earlier transfer from Host Publisher Studio has already installed the additional files. Click here for more details.

Test your modified application

You can access your modified Host Publisher application with the same URI used for the original application. For example, the sample application deployed here can be accessed at

<http://your.HostPublisherServer.com/HostPublisher/UofMApp1/inputPage.jsp>

WebSphere Tools

IBM WebSphere Development Studio Client for IBM iSeries V4

- **Included with WebSphere Development Studio for iSeries, Product Number 5722-WDS (processor-based)**
- **Or can purchase stand-alone Product Number 5724-A81 (user-based)**
- iSeries-specific enhancements for Java development
- iSeries-specific enhancements for Web development
- Integrated workstation based iSeries development tools including Remote System Explorer/Remote System Framework and JLPex editor

See Software Announcement Letter 202-127 dated June 4, 2002

This tool will satisfy the needs of most iSeries developers...

- iSeries specific enhancements are included in these Web and Java development tools to make it easier to develop Web and Java applications for the iSeries server.
- However, this Development Studio for iSeries does not provide support for applications requiring the use of EJBs or J2EE.
- For these functions, iSeries developers need to use WebSphere Studio Site Developer Advanced.



Other WebSphere Tools...

WebSphere Studio Application Developer (V4.0.3 for Linux and Windows)

– Part Number 45P8105 (user-based)

- A powerful Java development environment that supports JDK 1.3, configurable runtime, incremental compilation, scrapbook, dynamic debugging, and refactoring
- Advanced Web, Java, and XML development environments designed to J2EE 1.2 specifications
- Web services tools to quickly develop, describe, and deploy Web services-enabled applications based on open, cross-platform standards like UDDI, SOAP, and WSDL
- A Relational Schema Center focused on relational database design and database administration tasks such as import and mapping schemas and other advanced functions
- An integrated roles-based team environment

For more information, see http://www.ibm.link.ibm.com/usalets&parms=H_202-057

WebSphere Studio Application Developer is an easy-to-use, integrated development environment for building, testing, and deploying J2EE applications that rapidly grows and adapts to meet the most stringent business demands. This WebSphere Studio Workbench-based product is designed for Java and J2EE developers requiring integrated support for Java, EJB, Web, Servlets, JSP, XML and Web services. Additionally, it offers many quality and productivity enhancement functions to help you shorten development and test cycles.

Step 6. Install the J2EE files on the application server using WAS Administrator

Step 7. Install the J2EE files on the application server using WAS Administrator

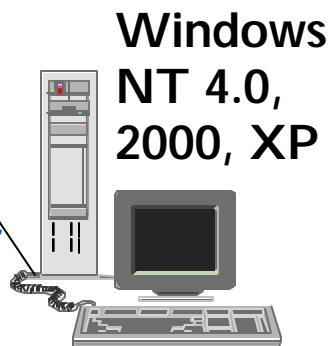


Working With the Server Side *Host Publisher Server (Runtime)*



WAS

Administrator
Console



Can administer
multiple Host
Publisher Runtime
Servers from one Host
Publisher
Administrator
Console

Fine-Tuning the Host Publisher Server for the Web

The navigation pane on the Host Publisher Administration page contains functions for the Host Publisher Server

- **Server Status**
- **Administration**
- **Connections**
- **Application Administration**
- **Problem Determination Tools**
- **Set Trace Options**

The image shows a screenshot of the Host Publisher Administration interface. On the left, a navigation pane titled 'Host Publisher' lists several items: Introduction, Server Status, Administration (circled in red), License Management, Connection Pools, Pool Definitions, Connections, All Connections, and Host Connections. On the right, there is a preview of the Administration page content, which includes a title 'IBM ServerWay Host Publisher Server Administration (204)', a 'Views (1)' section, and a globe icon.

Mature...
Scalable...
Available...

Notes: Host Publisher Server

Connection Manager

- Set of Java classes

- Encapsulates connection management

 - Session creation, priming, and destruction

 - Connection pooling

 - Userid/password pooling functions

 - Support Host Access (3270, 5250, VT) and Database (JDBC)

Administration

- Java servlet and associated JSP pages

- Accessed via Web browser

- Monitors and controls state of run time environment

 - start and stop server

 - license management

 - pool management

- Connection manager

- Application Administration

- Problem determination

- XML Legacy Gateway Administration

New Capabilities In Host Publisher V4.0:

Multi-language support

When using Host Publisher Administrator (on server) can view the Host Publisher documentation in languages other than the server's default language

Software Maintenance Utility

A new command-line tool to help you apply software fixes

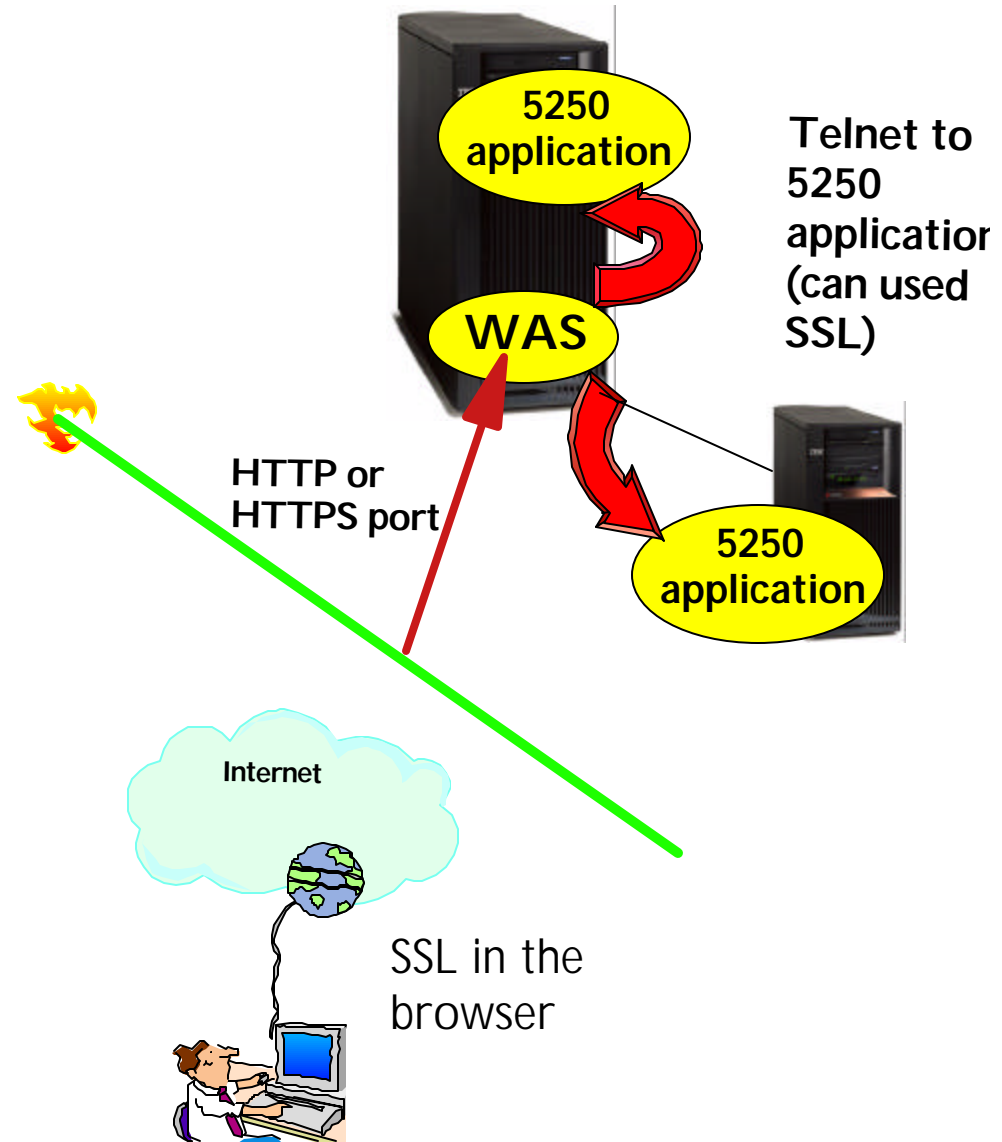
Security Features...

Typical security mechanisms available through the Web can be used to control authentication and access to existing applications including:

- Secure Socket Layer (SSL) for data encryption between browser and web server as well as authentication
- Secure Socket Layer (SSL) also provides encryption between Host Publisher and Host applications

Security mechanisms deployed for host application systems remain available to control access and authorization

- Secure access to Web applications and Host Publisher Administration by using access controls provided in WAS and HTTP server



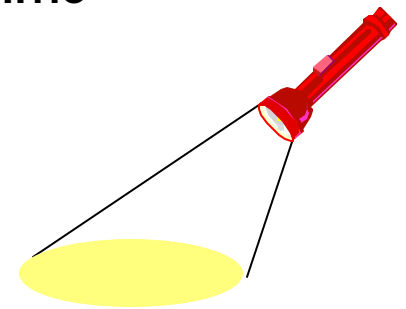
Performance Features...

Application Caching

- **Precompiles page into a Java Servlet**
 - If someone else asks for same page then the servlet is rerun
- **Page recompiled only when it changes**
 - Increases transaction rates and gives faster response time

Connection Pooling

- **For JDBC and 3270/5250/VT access**
- **Pool of connections open to data sources**
- **Can specify that all requests serialize on connection cache (so if 25 connections in pool and in use then 26th request waits for free connection) or can specify that once initial "X" connections in use then create an "X+1" connection**



RAS Features...

Supports WAS Workload Management features

- **Vertical and horizontal cloning**

- Can have multiple JVMs in WAS, and these can be clones
- Vertical cloning is limited to one machine (vertical cloning), and horizontal cloning is spread across multiple machines

- **Benefits are:**

- Improved throughput as requests can be **distributed across multiple JVMs**
- Better fault tolerance because if one JVM fails the **user request can be processed by any remaining** clone that can handle the request.
- If someone else asks for same page then the servlet is rerun
- Vertical cloning is also useful when configured on a machine which is powerful enough that a **single JVM cannot effectively utilize its CPU power** (such as on a multiprocessor machine)

Host Publisher V4.0 Enhancements

Support for WAS V4.0 (J2EE compatibility)

- Support for AEs, AEd and AE
- This includes migration of Host Publisher applications to achieve J2EE compatibility

Web Services

- Quickly extend legacy services as new web services
- IOs and EJBs are enabled as Web Services. Web Services creation occurs in WebSphere Studio

WebSphere Portal Family support

- Extend legacy content as new portal content- WPS 2.1

Accessibility (CI 162)

- Web applications produced by Host Publisher Studio are accessible
- Keyboard accessibility for all components but HP Admin and DB access.
- Added documentation of accessibility features

Server Multi-Language support

- Host Publisher Administrator and documentation

Serviceability tools

- Software Maintenance Utility and Information Bundler

iSeries two stage install (install and config)

Notes: Web Services

Web Services provide a way for applications to connect and interact on the Web more easily and efficiently. Web Services are self-contained, modular applications that can be described, published, located, and invoked over the Web. Platform-neutral and based on open standards, Web Services can be combined with each other in different ways to create business processes that enable you to interact with customers, employees, and suppliers.

Typically, Web Services use Internet protocols, such as HTTP, use XML message formats, and are plugged into Web Service registries where other developers can combine and deploy them. Think of them as strategic building blocks for automated business processes that can be deployed across your enterprise and shared with other enterprises.

Support for Web Services has been implemented in a number of IBM software products, including WebSphere Application Server and WebSphere Studio tools (such as WebSphere Studio Application Developer) at the 4.0.2 level or above.

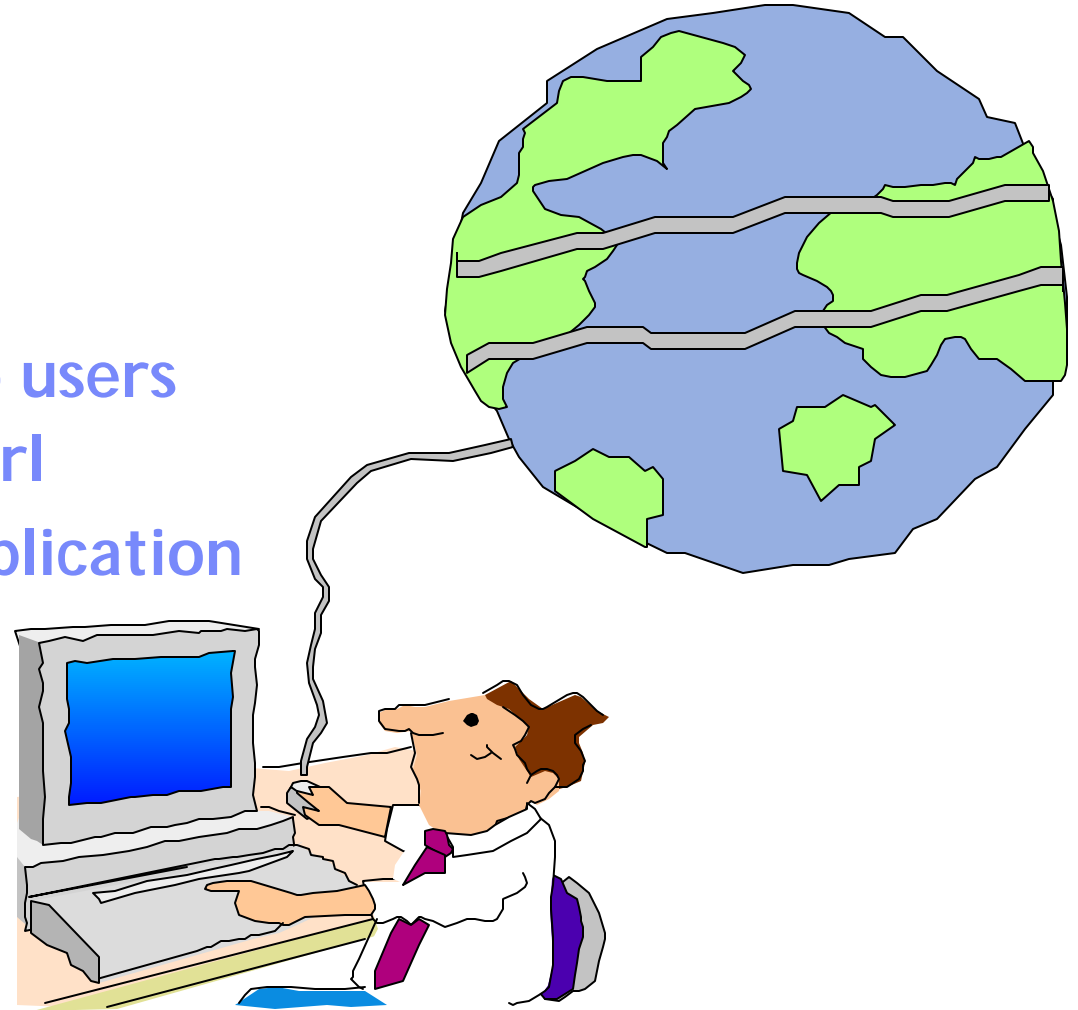
You can use the Host Access and Database Access components of Host Publisher Studio to create supporting files that enable Host Publisher Integration Objects and EJB Access Beans to be deployed as Web Services. Application Integrator assembles these Java objects (and optionally JSP pages that reference the Java objects) into a J2EE .ear file. You can then import the .ear file into a new or existing WebSphere Studio project, where you can create and deploy Web Services.

To create an Integration Object in Host Publisher and then enable it to become a Web Service, you would perform the following steps:

1. Using Host Publisher Studio and create 1 or more Integration Objects or EJB Access Beans with **Options > Create Web Services Integration Object Support** checked.
2. Import the Web Services Integration Objects or EJB Access Beans into Application Integrator. Create an application that consists of Web Services Integration Objects, EJB Access Beans, or both, and then generate an .ear file for the application by clicking **File > Create J2EE Archives**.
3. Import the .ear file into a J2EE-enabled WebSphere Studio tool (for example WebSphere Studio Application Developer).
4. Use the WebSphere Studio tool to create a Web Service.
5. Generate a sample application and run it to test your Web Service.
6. Complete development and testing of the application you imported in step (3).
7. Deploy the completed application.

See White Paper 'IBM and the Strategic Potential of Web Services' at http://www-3.ibm.com/software/solutions/webservices/pdf/May13_IBM_WebServices.pdf

Step 7.
Ready for Web users
to enter url
to access the application



WebSphere Host Publisher NLVs

WebSphere Host Publisher (V4.0) - Server provides National Language Versions (NLVs) for:

Chinese (Simplified and Traditional)	
English	Danish
French	Dutch
German	Finnish
Italian	Hungarian
Japanese	Norwegian - Bokmal
Korean	Polish Language
Portuguese (Brazilian)	Portuguese
Spanish	Portuguese MNCS
Turkish	Romanian
Arabic	Russian
Belgium Dutch	Slovakian
Croatian	Slovenian
Czech	Swedish

Note: WebSphere Host Publisher does not support secondary languages.

WebSphere Host Publisher (V4.0) - Studio provides National Language Versions (NLVs) for:

Chinese (Simplified and Traditional)
English
French
German
Italian
Japanese
Korean
Portuguese (Brazilian)
Spanish
Turkish

New in WebSphere Host Publisher V4.0: **Multi-language support**

When using Host Publisher Administrator (on server) can view the Host Publisher documentation in languages other than the server's default language

Host Publisher - Key Differentiators

Easily extend just a portion of existing applications to the Web...

- **Can take an existing full-function, in-house application and present **only selected paths** to Web users...**
 - ▶ **Can merge/split applications and screens**
- **Can translate system screens also**
- **Source code not required**
 - ▶ **Existing green screen still available**
- **Supports multiple types of user interfaces**
 - ▶ **5250, 3270, etc**



This tool enables you to 'really' take an existing host application and move it to the worldwide Web!

Host Access Transformation Server (HATS)

Host Access Transformation Server (HATS)

- **A Web-to-host HTML emulator...**
 - ▶ 3270, 5250...
 - ▶ with a rules-based transformation engine...
- **Converts green screens to graphical user interfaces (GUIs)...**
 - ▶ in real time
- **Works with system screens too...**

Powered by Eclipse™ technology
Windows®



WebSphere Welcome to IBM WebSphere Host Access Transformation Server (HATS)

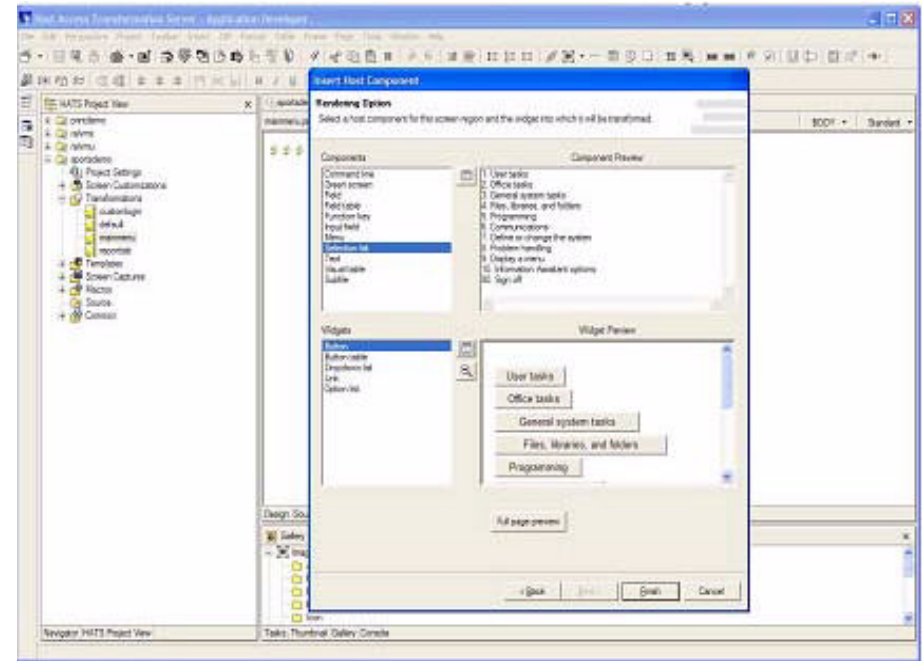


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Capabilities ...

- **Easy Web-to-host first step**
 - ▶ "Near" load-n-go implementation
 - ▶ Low skills requirement
- **Host screens are converted to GUIs on the fly, in real time**
 - ▶ Preserves existing application flow
- **Eliminates need to customize every screen**
 - ▶ Rules-based, customizable
- **Zero footprint on the desktop**
- **Industry-standards**
 - ▶ HTML, HTTP, HTTPs



HATS Studio plugs into the Eclipse-based WebSphere Studio, and provides an easy-to-use wizard-based environment for converting host screens to a web-like appearance and functionality

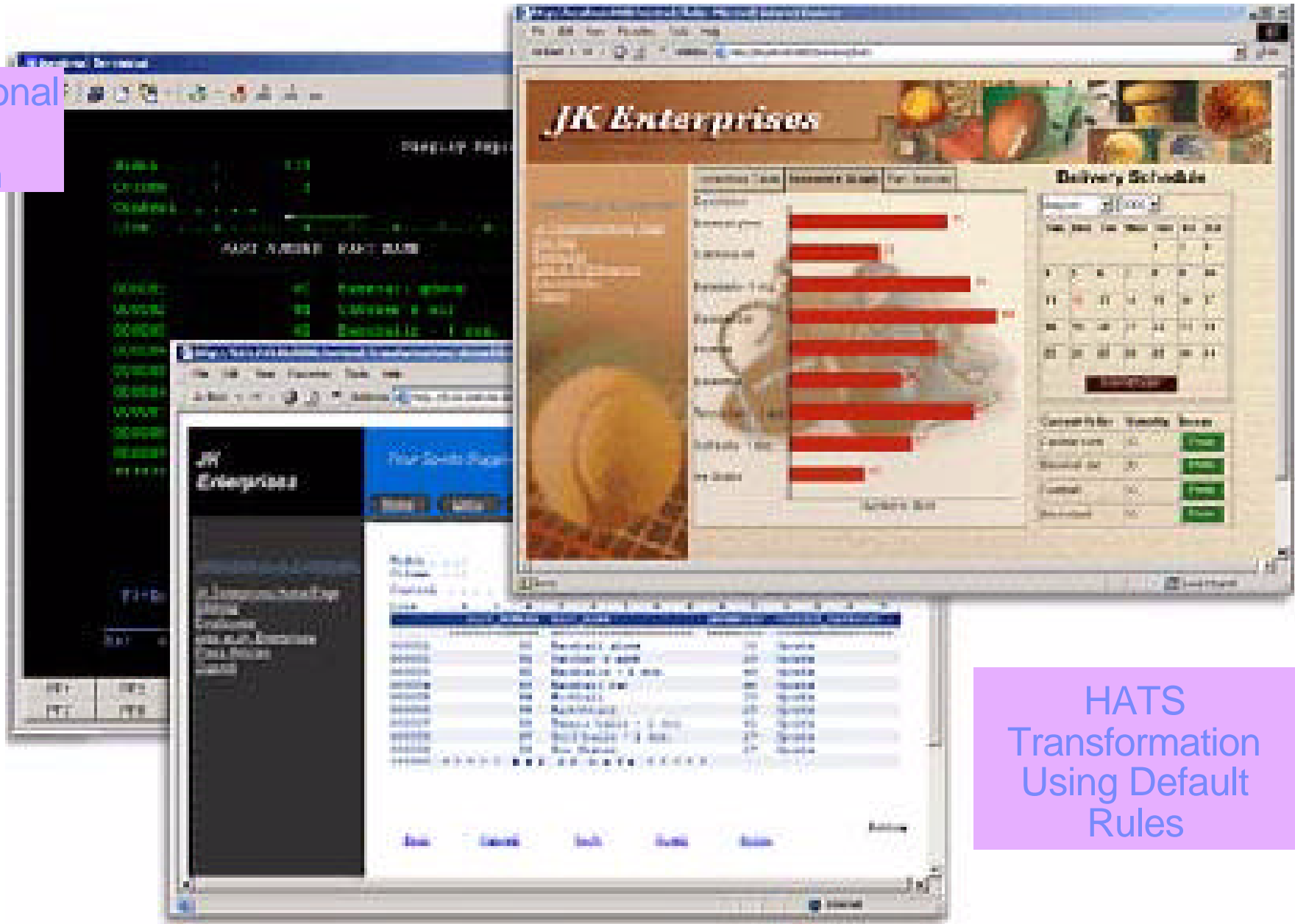
Notes: HATS

The standard HATS application model dictates that all configuration is done in the HATS Studio (a plugin to WebSphere Developer Studio). Once configuration has been completed in the Studio, the application is assembled into an enterprise application; an application that then can be installed on a WebSphere Application Server.

By the time a standard HATS application reaches the application server, configuration has already taken place in the HATS Studio. This application can be installed on the application server, started, and begin to service clients.

Example

Traditional Green Screen



HATS Transformation Using Default Rules

Packaging

Available through Passport

WebSphere Host Integration Solution

- IBM Personal Communications (Intranet only)
- WebSphere Host On-Demand
- **WebSphere Host Publisher**
- **WebSphere Host Access Transformation Server (HATS)**
- IBM Communications Servers
- IBM Screen Customizer
- WebSphere Studio Professional Edition (Internet only)
- WebSphere Application Server Advanced Edition 4.0 for Windows (development)

Available through iSeries

iSeries Access Family

- iSeries Access for Windows
- iSeries Access for Web
- **WebSphere Host Publisher**
- iSeries Access for Wireless
- **HATS Limited Edition**

same product

HATS LE
subset of
HATS

Notes: HATS

HATS is shipped as part of the Host Integration Solution bundle

Announcement Date - 9/24/2002

General Availability

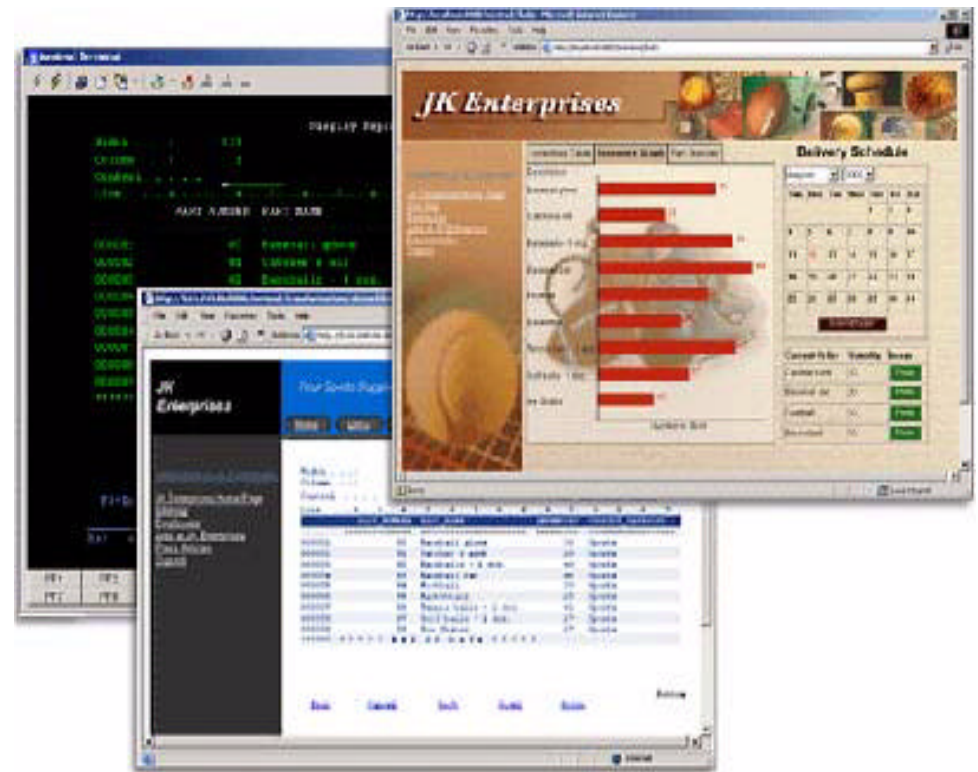
- 12/2002 - Windows NT, Windows 2000, AIX, Solaris
- **1/20/2003 - iSeries**
- 2Q03 Linux, zLinux
- 4Q03 - zSeries

HATS Benefits

- Increases productivity and reduces training costs
- Extends legacy applications to the widest possible audience...
- ▶ Delivers HTML to Web browsers...
- ▶ Presents host screens as familiar Web interfaces.
- Host application user interfaces can be quickly delivered over the Web
- ▶ Green screens converted to GUIs according to HATS default rules...
- ▶ Further customization added as time and resources permit.
- HATS Studio
- ▶ Plugs in to the Eclipse-based WebSphere Studio
- ▶ Easy to use wizard-based environment for converting host screens to a web-like appearance and functionality
- No programming skills are required

Key Differentiators - HATS

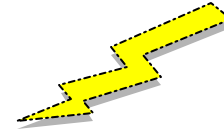
- Rules-based data stream translator
- Designer is plug-in to WebSphere Studio Development Tools
- User interface customization available
- Merge/split applications and screens
- Translates system screens also
- Supports multiple types of user interfaces - 5250, 3270



Host Access Transformation Server Limited Edition



HATS LE



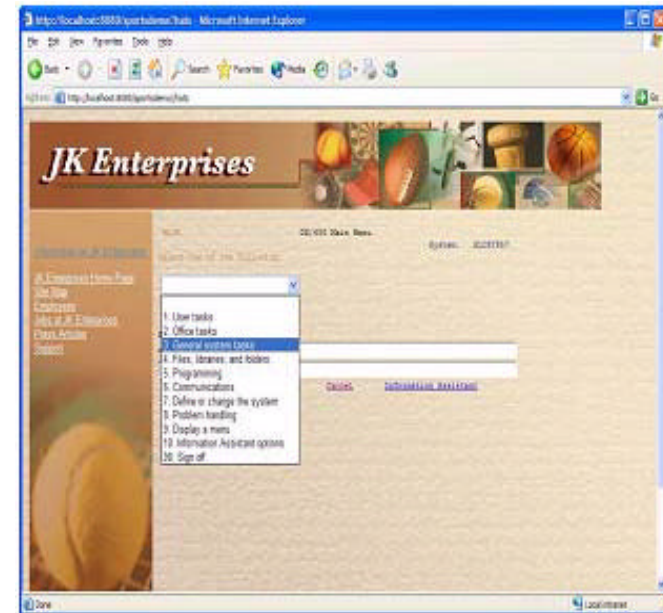
Part of iSeries Access Family - 5722-XW1

- **Available 6/30/03**

- ▶ Will automatically ship with new orders for 5722-XW1
- ▶ Existing iSeries Access Family customers can order no-charge **Feature Number 2646 of 5722-XW1** to receive HATS LE

HATS Limited Edition

- **Runs in a browser**
 - ▶ Delivers HTML to the desktop
 - ▶ Only software needed on the client is a Web browser
 - ▶ Uses browser SSL features
- **Works on all 5250 screens**
 - ▶ Stock Templates included so you can quickly personalize your web page to your company look and feel
- **Screens are converted on the fly, in real time**
 - ▶ Selection lists can be converted to hot links, buttons, drop-down menus, or option lists (radio buttons)
 - ▶ PF keys are can be converted to buttons or hot links
- **No programming necessary**
 - ▶ Doesn't break if changes are made to 5250 application
 - ▶ No need to access source code
- **Runs on WAS V4 and V5 (including Express)**



*A quick and easy way
to put iSeries
applications on the
Web*

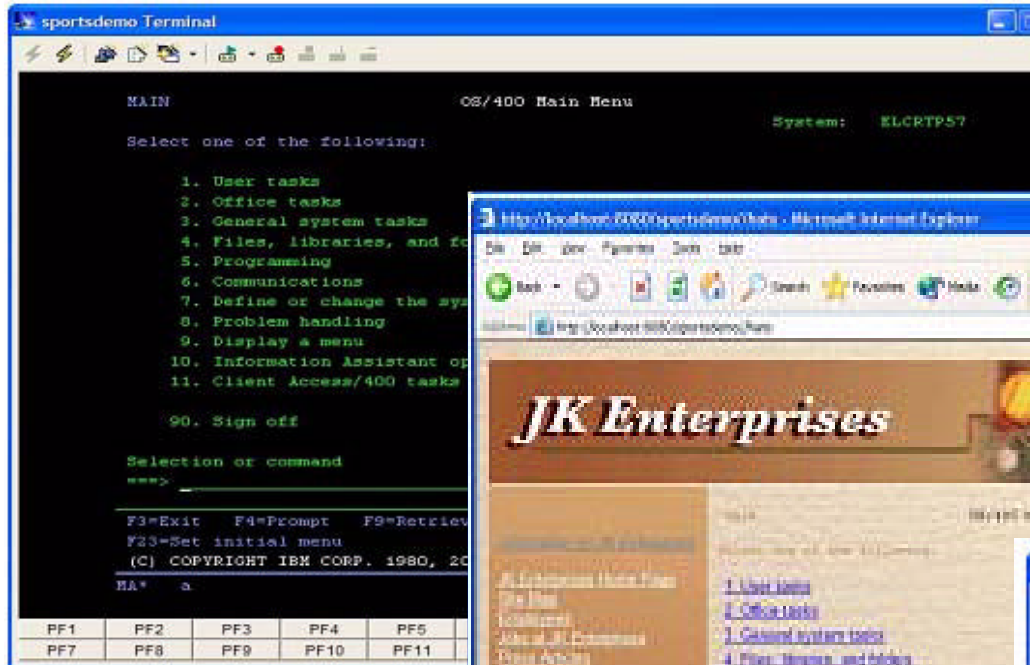
Notes: HATS LE overview

HATS LE is a reduced-function version of HATS V4. HATS LE is delivered in the form of a J2EE enterprise application. Customers will need to install this application on their application server. Once the application has been installed, started, and configured, web browser clients will be able to connect to and use it.

HATS LE is targeted for a lower skill set by eliminating the dependence on needing to use WebSphere Studio client tools to set up and run it. HATS LE gives customers the ability to quickly get their host applications to the web by reducing the number of steps to configure the application, removing the requirement to install and understand WebSphere Studio client tools, and removing the complexity of customizing screens. HATS LE does not require administrators to have any HTML or Java skills.

HATS LE provides a new HTML-based Configuration Wizard to allow the administrator to set connection parameters, configure templates (including the ability to add corporate logos), and to change the default transformation settings. HATS LE uses the existing default transformation from the standard HATS V4, and there is no ability to create custom transformations. The Configuration Wizard is based on the HATS V4 Studio Project Wizard and Editor.

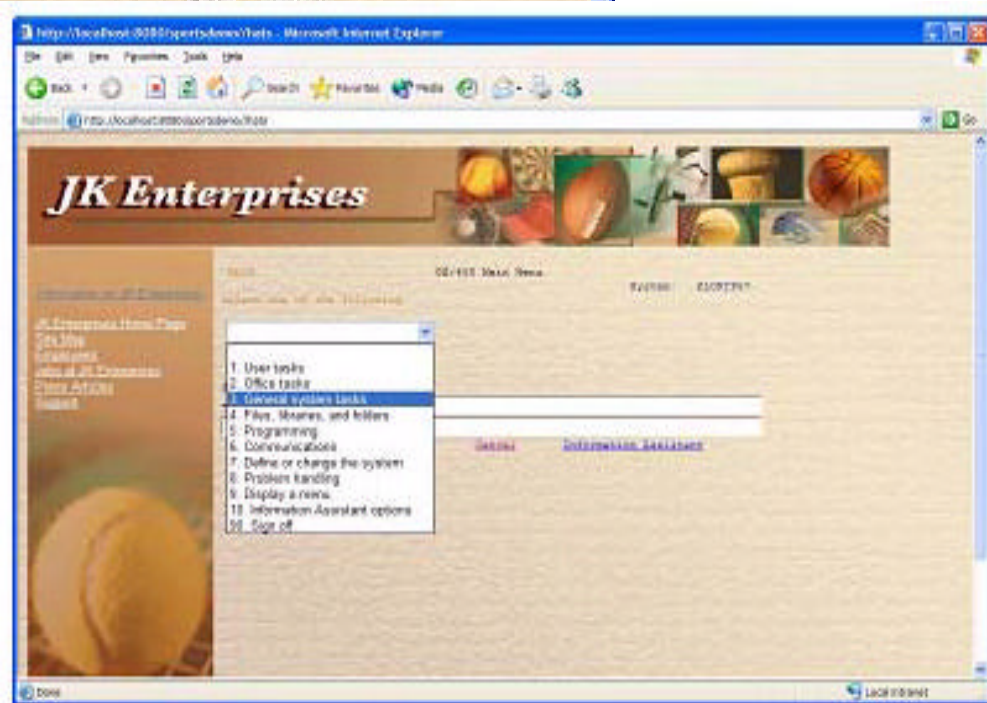
HATS LE: Real-time Screen Conversion



Traditional green screen



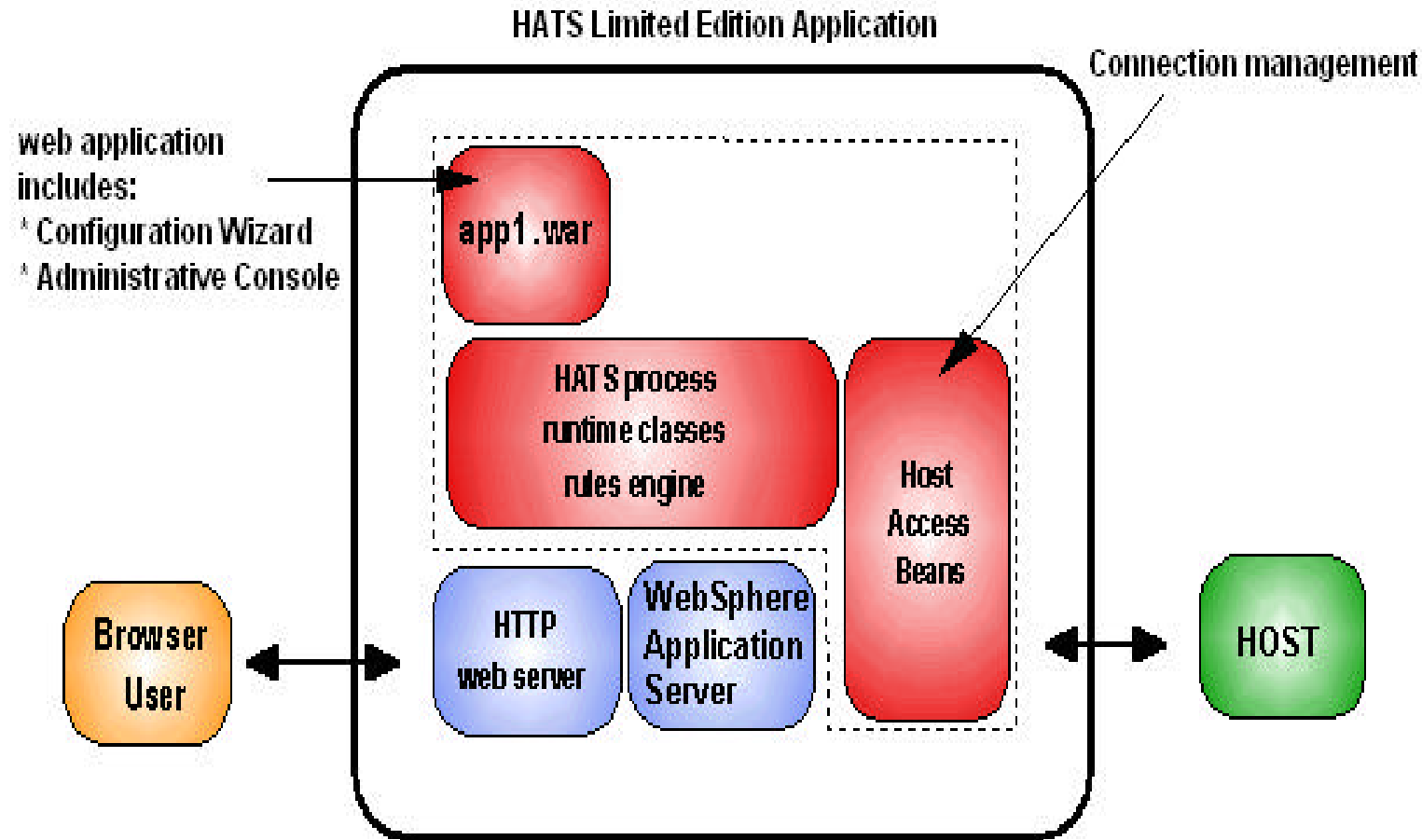
Drop-down menu



HATS LE on-the-fly conversion using customer-provided HTML (logo and graphics)

HATS LE - internal view

- Administrative Console
- Configuration Wizard



HATS LE will be delivered in the form of a J2EE enterprise application. Once it is installed/configured/started on the iSeries, web browser clients will be able to connect to a url and start using it.

HATS LE - server/client requirements

Server Requirements

HATS LE is designed to run on any platform supported by HATS V4, however, testing will be limited to iSeries only. The following application servers are supported:

- WebSphere Application Server Advanced Edition 4.043 and higher
- WebSphere Application Server Advanced Edition Single Server 4.03 and higher
- WebSphere Application Server Version 5.0
- WebSphere Application Server Version 5.0 Express

Client Browser Requirements

Clients connecting to HATS LE will have the same browser requirements as those users connecting to a standard HATS application:

- Netscape 6.0 + and IE 5.0 +
- Netscape 4.72 (no keyboard support)

HATS LE administrators will have the same browser requirements as client browsers connecting to the application.

Internationalization

- GB18030 phase 1 certification.
- Support for all languages and code pages at runtime.
- BiDi support
- DBCS characters will be supported in the customization wizard as well as connecting to DBCS codepage host applications.

The web- accessible Administrative Console, and Configuration Wizard will be translated into the following Group 1 languages:

- English
- Portuguese/Brazilian
- French
- Japanese
- German
- Traditional Chinese
- Spanish
- Korean
- Italian
- Simplified Chinese

Portlet Support

HATS LE does not run in the WebSphere Portal Server. Customers will need to upgrade to HATS to take advantage of this feature.

Online Help and Documentation

The following online information will be provided:

- Readme/installation. PDF and HTML. Translated
- Online help for wizard/dialog panels. HTML. Translated.

Online help will be available on all pages of the Configuration Wizard and, the Administrative Console, and the Application Builder. Context sensitive help will not be supported (as it currently exists in the HATS Studio) because this concept is not consistent with normal web-based applications. A link on each wizard panel will open online help for that panel in a new window. A readme file, specific to HATS LE will be available to the administrator in the Administrative Console and to the user prior to installing the product.

HATS LE - Admin Console

Administrative Console

- A web-based tool (different than the WAS administrative console) that allows the administrator to manage active connections, tweak configuration changes, active/deactivate the application, and launch the Configuration Wizard

Application started:	1/6/2003 1:32:12 PM
Current active connections:	17
Peak active connections:	23

The Administrative Console can be accessed by navigating to <http://serverName/HATSLE/admin>

Notes: Administrative Console

This is the default page shown for Administrative Console. The administrator using either the Administrative Console or the Configuration Wizard will be prompted to enter a user name and password, and must have "SECADM" authority associated with his/her account.

The **overview page** is the first page displayed to the administrator when they enter the console. This page will:

- Show the status of the application (inactive/active)
- Allow the administrator to change the status of the application
- Show when the application was started
- Show the current number of active connections
- Show the peak number of active connections (and the date/time when that occurred)
- Show host connection settings (IP address, port, etc)

Configure - the Configure section will allow the administrator to configure the application; (using the Configuration Wizard). the Configuration Wizard will be launched in the right-hand side of the Administrative Console window.

Manage Connections - the Manage Connections section will allow the administrator to manage all active connections to the application.

This page will:

- Show all active connections (in the form of a sortable table)
- Show when each connection started, how long since the connection was used, the IP address of the client, and the internal name of the session, the name/version of the browser the client has connected with, and the workstation ID of the connection.
- Allow the administrator to view the current host screen of the user
- Allow the administrator to terminate (stop) the session for one or more active connections

Advanced - the Advanced section will allow the administrator to configure more advanced settings of the application. This includes:

- Editing the application.hap (for tweaking purposes)
- Editing a selected template
- Exporting the application (for importing into HATS)

HATS LE - Configuration Wizard

Configuration Wizard

- A web-based tool to enable the administrator to configure HATS LE

Steps that need to be performed are:

1. Set up connection settings
2. Define default template to be used
3. Set up default transformation settings, such as:
 - Converting PF keys into buttons
 - AS/400 subfile support
 - Color remapping
 - Other minor enhancements



Notes: Installing and using Configuration Wizard

The Configuration Wizard is a web-based wizard used to configure and prepare the HATS LE for use by clients. The administrator can access the Configuration Wizard directly by:

- Navigating to the URL <http://serverName/HATSLE/config>
- Clicking the "Configure" option in the Administrative Console, or by
- Navigating to the URL <http://serverName/HATSLE/entry> before the application has been configured.

The first time HATS LE is accessed (or before it has been configured), a log-in page will be displayed. The administrator will need to supply a user name and password before beginning configuration. After the administrator has successfully logged in, a Welcome page will be displayed to inform the administrator that he/she is about to begin configuring the application.

The Configuration Wizard is the main functional component of HATS LE, and all configuration takes place after the enterprise application has been installed on the application server, but before it can begin servicing clients, it needs to be configured. The main objective of the wizard is to quickly and easily capture the needed information to get the application in service. The wizard is easy to understand and interact with and provides enough flexibility to make it useful.

Steps to be performed by the administrator in the Configuration Wizard:

- Configure host connection parameters.
- Select a default template, choose whether to show application or host keypads, and select whether to enable browser keyboard support.
- Configure default transformation settings.

The Configuration Wizard has navigation buttons (eg, Next, Back, and Finish buttons) along the bottom of each page which allow the administrator to navigate between pages of the wizard. The navigation buttons will appear at the bottom of the wizard as needed. For example, the "Next" button will not appear on the final page of the wizard because there are no further steps to complete. These buttons will be enabled/disabled depending on whether the developer has supplied enough information to continue. Validation of form values supplied by the administrator will be performed only on the server when the page has been submitted (either by clicking "Next", "Back", or "Finish"). The administrator will not be allowed to continue on to the next step until the current step has been successfully validated.

HATS LE - Connection Settings

Connection Settings

- **Host name**
- **Port**
- **Code page**
- **Workstation ID**
 - Set to a value (default)
 - Set from an HTTP session variable
 - Prompt user
- **Security**

1

Configuration Wizard : Step 1 of 3 - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://serverName/HATSLE/config> Go

Step 1 of 3: Connection Settings Help ?

Configure your host connection settings. For more information, click the Help icon.

Host name:	<input type="text" value="serverName"/>
Port:	<input type="text" value="23"/>
Code page:	<input type="text" value="037 United States"/>
Workstation ID:	<input type="radio"/> Set to value (wildcards allowed): <input type="text"/> <input type="radio"/> Set from HTTP session variable: <input type="text"/> <input type="radio"/> Prompt user <input type="checkbox"/> Allow override in URL
Security:	<input type="checkbox"/> Enable SSL (Secure Sockets Layer) Certificate file: <input type="text"/> <input type="button" value="Browse..."/>

Back Next Finish Cancel

Done Local intranet

Step 1 : Configuring the Connection Settings

The first step of the Configuration Wizard is to ask the administrator to supply the host connection parameters. These settings define which host server the user connects to when he/she accesses the HATS LE. The administrator needs to supply the host name (or IP address) of the host system (a default value of "localhost" will be prefilled in this field), the port number (a default value of "23" will be prefilled in this field), and the code page. The administrator also needs to select how HATS will gain the workstation ID for each connection when that connection is initiated. The three options are:

- Set to a value - this value can either be a hard-coded string (not recommended) or a string containing HOD-supported workstation ID wild cards and characters (see the HOD documentation for more information). This is the default selection.
- Set from an HTTP session variable - a variable containing the workstation ID may have already been supplied (or calculated) in another JSP or servlet in the application, this option allows the developer to use this variable's value as the workstation ID for the connection.
- Prompt user - ask the user to supply a workstation ID when he/she starts the application. A web-based dialog will be displayed to the user on application start prompting him/her for his/her workstation ID. The value supplied by the user will be stored as a cookie on the client browser and used to pre-fill the dialog on the next connection attempt. This dialog will be displayed in the preferred language of the client browser (unless that language is not supported).

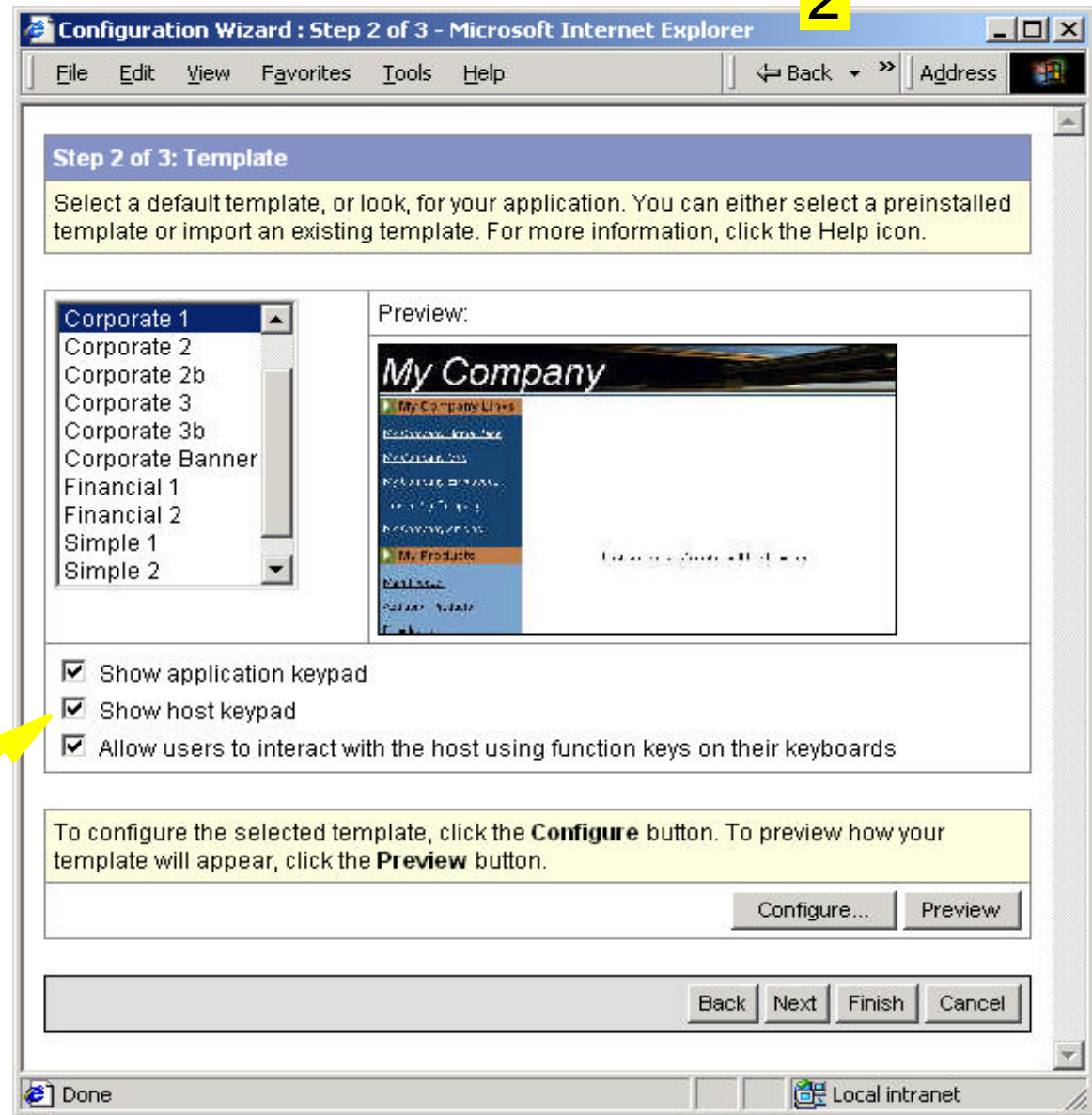
The administrator also has the option to allow or not allow the user to supply a workstation ID in the URL (by supplying a value for the "workstationID" parameter). If this option is on, a supplied workstation ID in the URL will override any value (or configuration option) supplied by the administrator. For example, if the administrator has chosen to prompt the user for a workstation ID, but the user supplied a workstation ID in the URL, the user will not be prompted to supply a workstation ID, and the value in the URL will be used to initiate the connection.

The administrator can also select whether to enable SSL (secure sockets layer) security between the host server and the application server (if applicable). If SSL is enabled, the administrator can supply an optional security certificate.

Once all fields on the page have been filled in with valid values, the administrator is allowed to continue onto the next page. At this point, all required information will have been gathered from the developer and the Finish button will become visible. The administrator can choose to continue configuring the application or proceed to using the application.

HATS LE - set up screen background

- **Templates included in HATS LE**
 - ▶ Blank
 - ▶ Classic Terminal
 - ▶ One that looks similar to iSeries Access for Web



Keypads, keyboard functions

Step 2 : Selecting and Configuring the Template

The second step of the Configuration Wizard is to ask the administrator to select a default template, or look, for the application. The following templates will be provided:

- Blank
- Classic Terminal
- One that looks similar to iSeries Access for Web

Selecting a template in the list will cause a thumbnail preview of that template to be displayed. The administrator can tailor such things as the company name, company logo, The administrator can also edit the JSP source of the template from the web to provide better consistency with current web applications. The feature will not be made available in the wizard, but only shown in the Administrative Console.

The administrator can also choose whether to show the application keypad and host keypad, and whether to allow end users to use their keyboards (when using a compatible browser) to interact with the host system (ie support for function keys and other designated key combinations). Detailed configuration of the application and host keypads will not be made available in this wizard. By default, the application keypad, host keypad, and keyboard support options will be enabled.

Once the administrator selects a template, it can then be customized (if it has any customizable options) and previewed. Clicking the "Preview" button will show a preview of the template in a new browser with a sample host screen; to quickly see how the template will appear to the end user. Clicking the "Configure..." button will show the "Configure Template"

Customizing a Template

2a

Use the 'Classic' Template to look more like your current Corporate Site

Set up your:

- Company name
- Logo
- Corporate Links
- ...

Configuration Wizard : Configure Template - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://serverName/HATSLE/config/configureTemplate.jsp?dsfdfff> Go

Configure Template : ClassicTerminal.jsp [Help ?](#)

Configure this template to look more like your current corporate site. For more information, click the Help icon.

Window title:

Company name:

Logo: Browse...

Stylesheet: smallfonts.css

Corporate links: MY_LINK

Add Edit Remove

To preview how your template will appear, click the **Preview** button.

Preview

OK Cancel

Done Local intranet

Step 2a : Customizing a Template

Each template shipped with HATS LE has a set of configurable settings (the size of this set depends on the complexity of the template). This will give the administrator the ability to customize the look of HATS LE. Special JSP tags in the templates will be read at design time and a dynamic page of options will be displayed to the administrator.

An example of this JSP tag is as follows: `<HATSLE:Template name="COMPANY_NAME" description="%company_name" type="String" defaultValue="My Company Name" configurable="true" />`

The tag consists of these attributes:

- name - the internal name, or key, of the attribute name (non-translated). Required.
- description - the translated string displayed to the administrator during configuration. A description value preceded with a "%" will be looked up in an appropriate translated resource file. Required.
- type - the type of the value. Valid values include String, Image (gif/jpeg supported), Link List, and Stylesheet. Not required. Default value is "String".
- defaultValue - the default value used if no value is specified by the user OR if the "configurable" flag is set to false. Not required. Default value is "".
- configurable - a flag used to determine whether the administrator is given the ability to modify the value of this configurable option in the Configuration Wizard. Not required. Default value is "true".

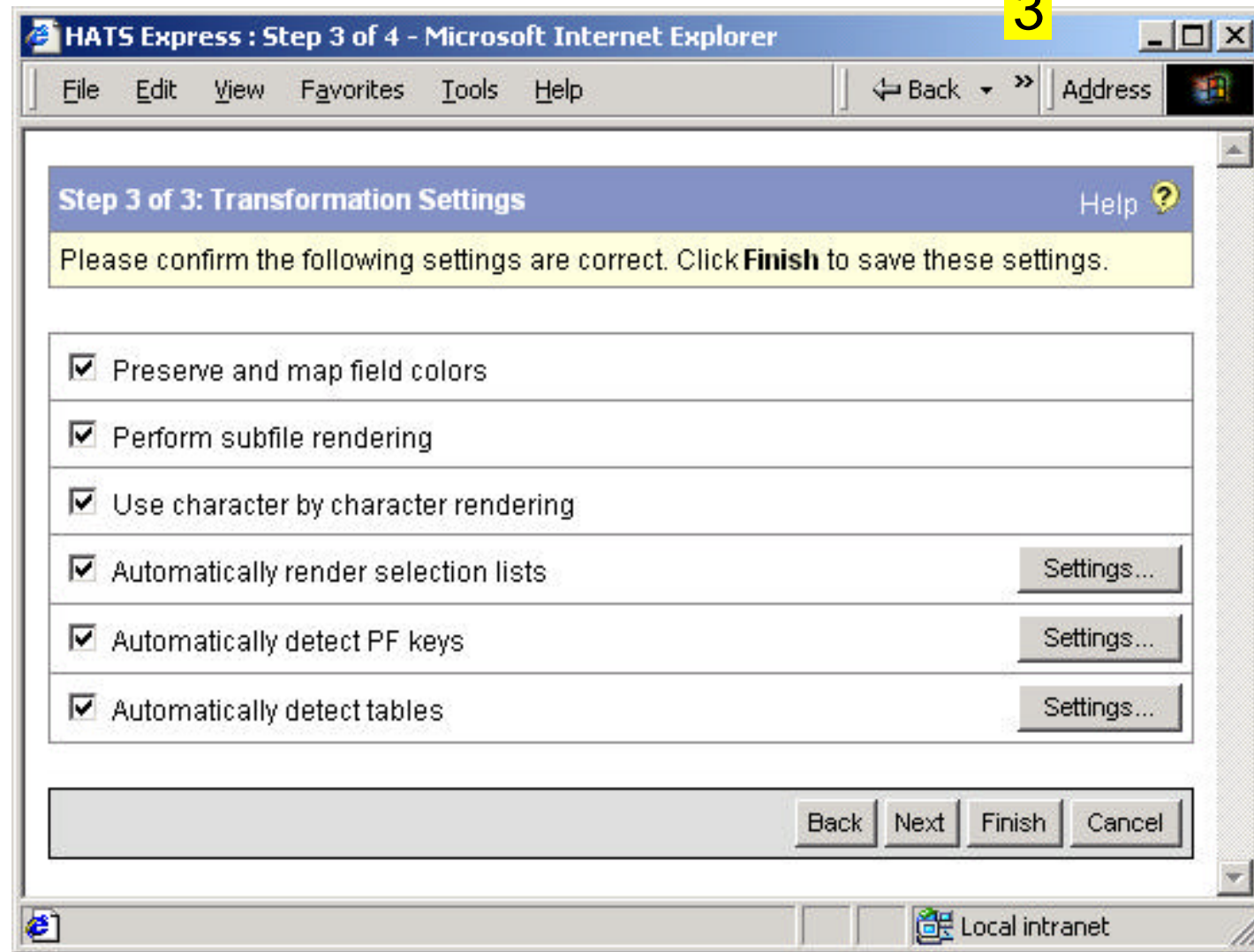
HATS LE - define end user 'look and feel'

Default transformation features are:

- Automatic selection list rendering
- Automatic detection of PF keys on the host screen
- Automatic subfile rendering
- Automatic table detection

Can also configure:

- What determines a PF key on the host screen (ie, delimiters, etc)
- How those PF keys will be rendered (either as buttons or links).



*An end user connects to HATS LE by navigating to a URL:
<http://serverName/HATSLE/entry> or simply <http://serverName/HATSLE>*

Notes: Step 3. Configuring Default Transformations

The third step of the Configuration Wizard is to customize how HATS LE will appear to the end user. The administrator can turn on/off automatic detection of certain host screen components. Default transformation features in a HATS Limited Edition application:

- Automatic selection list rendering
- Automatic detection of PF keys on the host screen
- Automatic subfile rendering
- Automatic table detection

Any or all of these features can be turned off by the administrator. The administrator can also configure different properties for each feature. For example, ability to configure what determines a PF key on the host screen (ie, delimiters, etc) and also how those PF keys will be rendered (either as buttons or links).

HATS Limited Edition will take advantage of the default screen transformation technology already available in HATS. The set of options for default transformation in HATS LE will be smaller than the set currently in HATS V4. The set of options is smaller because HATS Limited Edition is specifically targeting 5250 host applications which are generally more consistent in nature than mainframe hosts.

Connecting to the Application

The final interactive step of the Configuration Wizard is to allow the administrator to view the settings -- this includes host connection parameters, default template, customization settings, etc. The administrator can then accept these settings by clicking the Finish button. This will save the changes to the appropriate files. The administrator then chooses whether to activate HATS LE. It cannot be accessed by client browsers until it is activated. This option will be turned on by default. Once the administrator clicks Finish, HATS LE will connect to the host and start; and the administrator will be presented with the signon page (presumably) of the host system.

Once the administrator has configured HATS LE, an end user can connect to the application by navigating to the URL, <http://serverName/HATSLE/entry> or simply <http://serverName/HATSLE>.

If HATS LE has been activated by the administrator, the user will see the first host screen on the configured host (assuming the connection parameters supplied by the developer were correct).

Differences - HATS vs HATS LE

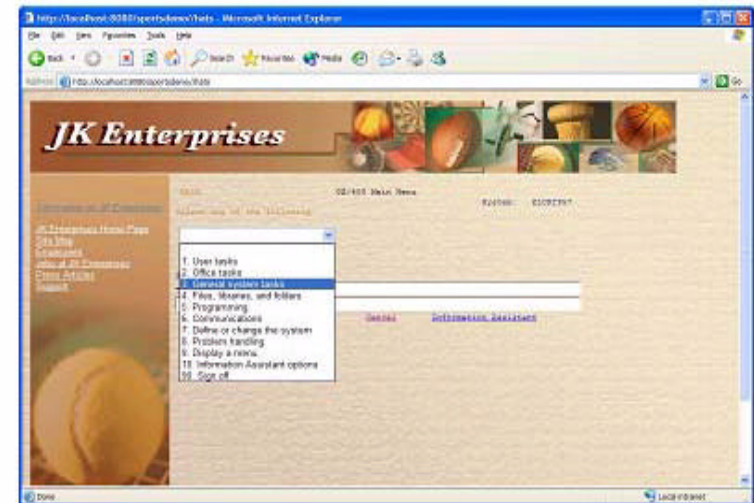
Features in both HATS and HATS LE

- Default host screen transformation
- Configuration of host connection settings
- Ability to chose a standard template
- Ability to turn on/off application and host pads
- Keyboard support

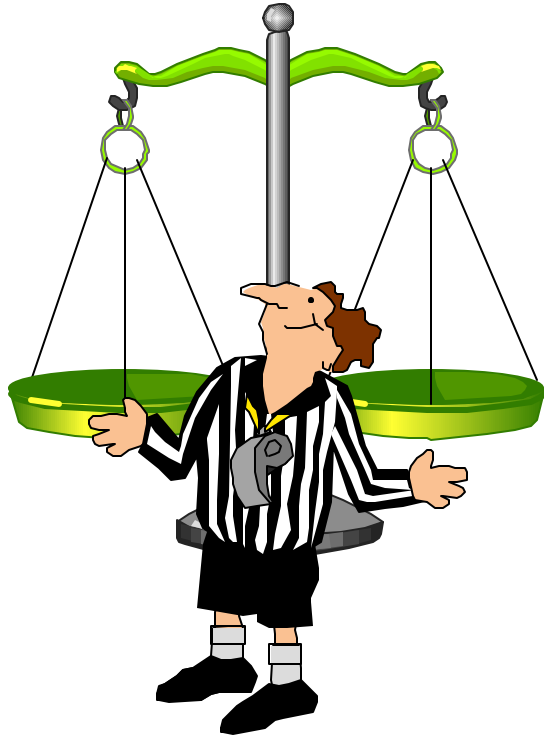


Features in HATS, not in HATS LE

- Screen customizations
- Support to play and record macros
- Text replacement
- Support for global variables
- Support for custom Java business logic



Customers with 5722-XW1 will be able to order a chargeable upgrade to full HATS offering



Other Products

WebFacing

Before and After WebFacing

Session A - [24 x 80]

File Edit Transfer Appearance Communication Assist Window Help

PrtScr Copy Paste Send Recv Display Color Map

```

Z0000001          Sign On/Off

Environment . . . : Appcon/IBM Test System...

Type information. Then press Enter.

Required...

  Identification. . . _
  Password. . . . .

Optional...

  Company . . . . . _
  Division. . . . . _

(C) 1992 Copyright Application Consultants.
F1=Help  F2=Field help  F3=Exit
  
```

Má a 09/039

Connected to remote server/host TORAS48F using port 23

APPCON - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites History Print Copy Paste

Address http://localhost/wflabxx/servlet/com.ibm.as400ad.webfacing.runtime.httpcontroller.ControllerServlet/APPCON

APPCON

Z0000001 Sign On/Off SSSSSSSS Enter Help

Environment . . . : Appcon/IBM Test System... Field help Exit

Type information. Then press Enter. CA03

Required...

Identification. . .

Password.

Optional...

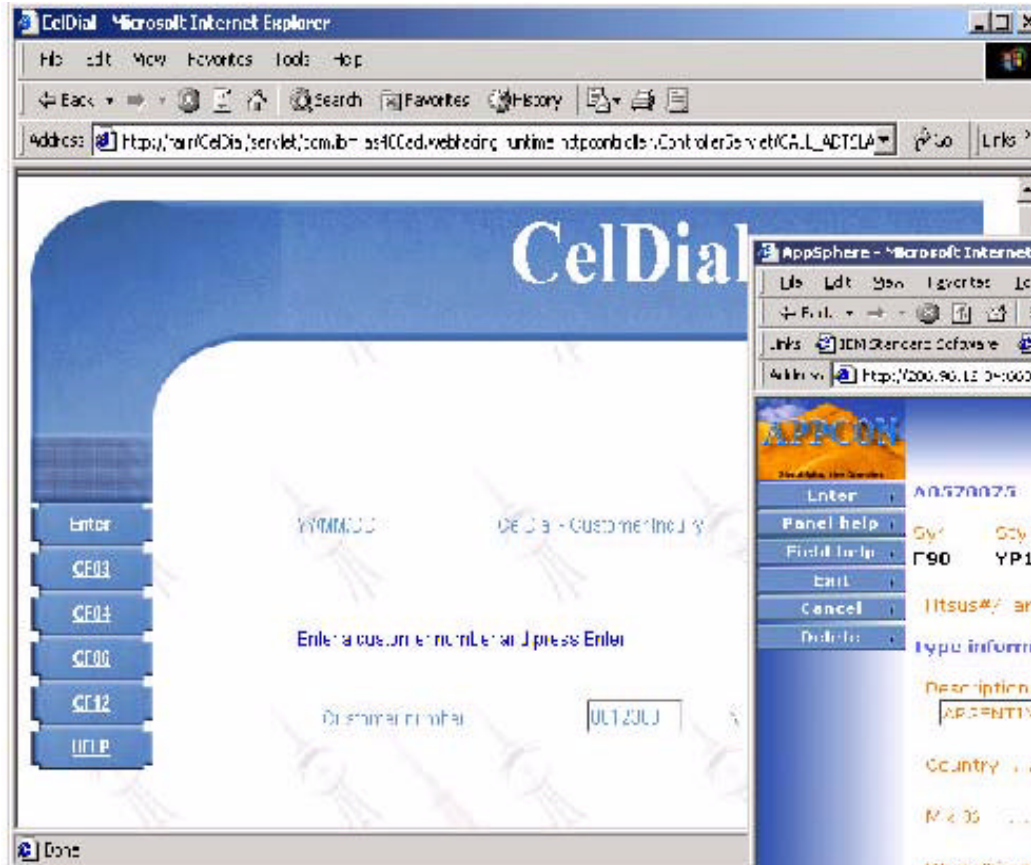
Company

Division.

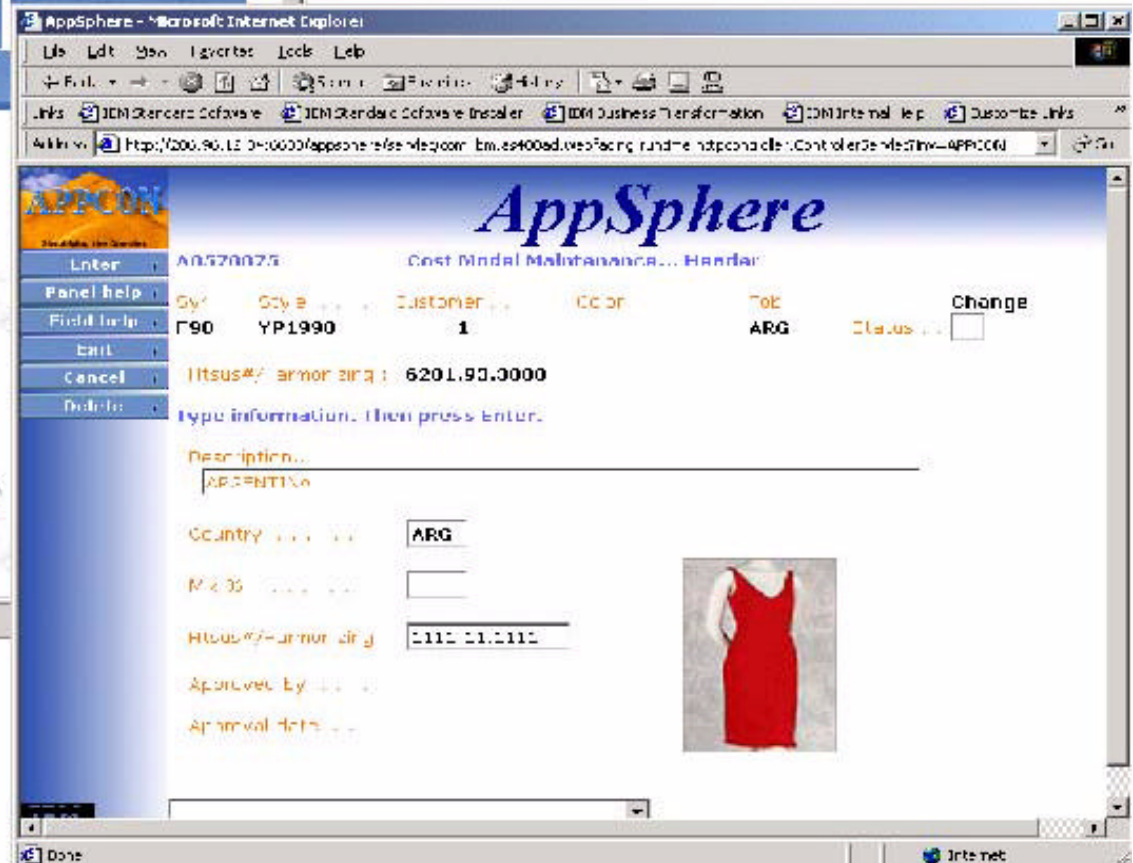
(C) 1992 Copyright Application Consultants.
F1=Help F2=Field help F3=Exit

Done Local intranet

After WebFacing



... Like this



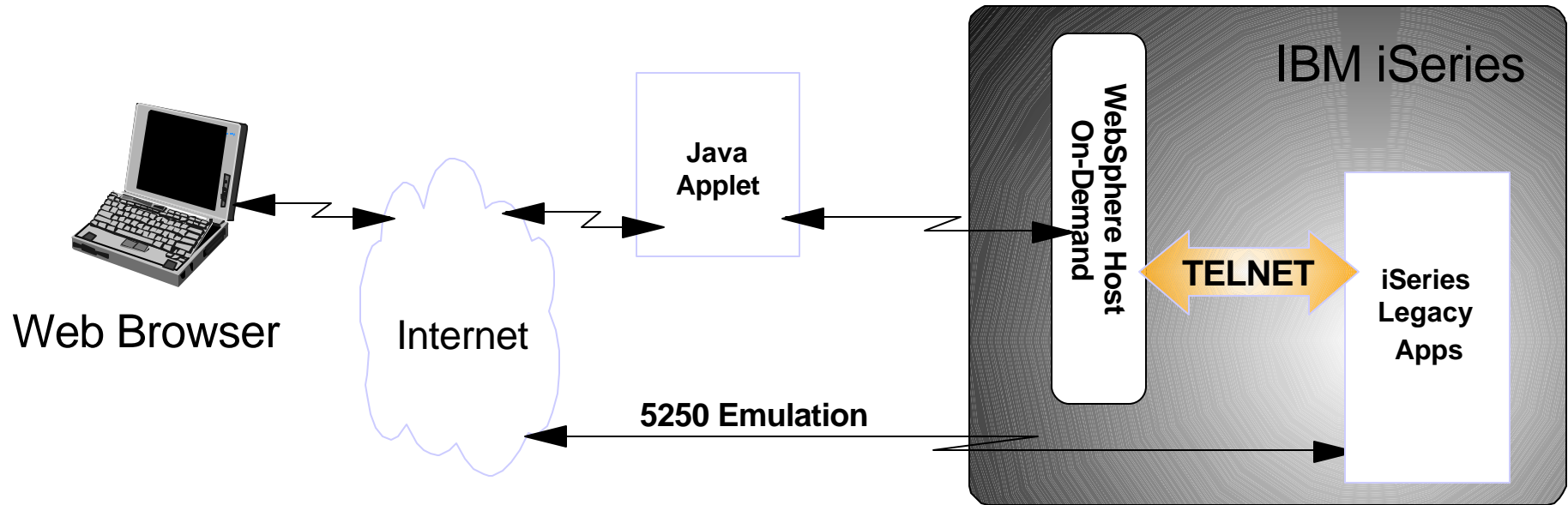
Can do more with existing application by using WDS tools...

Key Differentiators

■ IBM WebFacing Tool

- ▶ Conversion tool .. from DDS source to JSPs
- ▶ Semi-automatic conversion
- ▶ **No interactive feature** required with V5R2 and new hardware
- ▶ **Designed for iSeries**
 - Uses WDS*c* for iSeries to provide unique iSeries functions to programmer

WebSphere Host on Demand



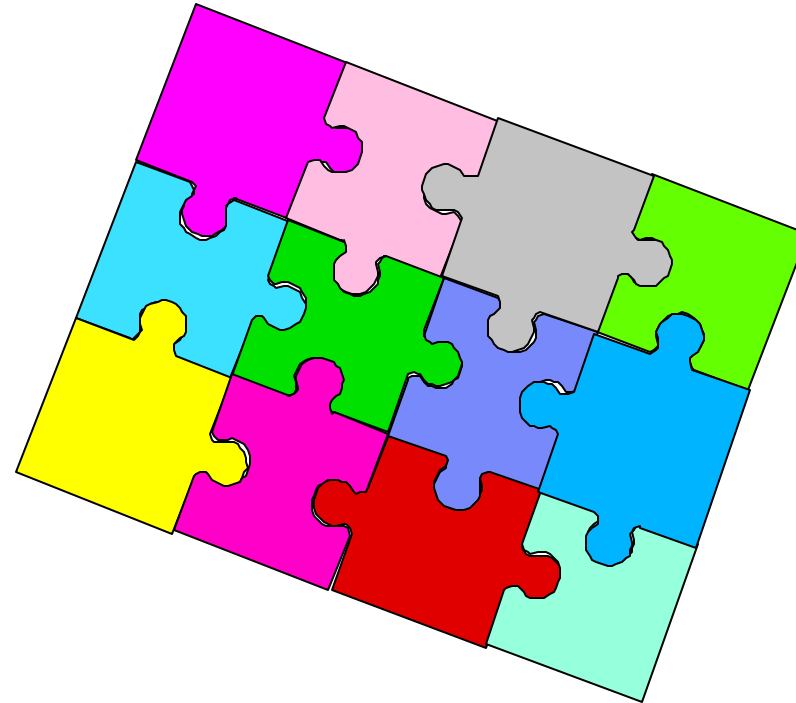
■ Basic 5250 Emulation

- translation from 5250 data stream to HTML at execution time
- my be done via Java applet

■ Uses Screen Customizer for GUI

■ Available via WebSphere Host Access Client Package and WebSphere Host Integration Solution

■ Interactive Job Workload



Could use a combination of these products...

Sample Web Page - users not familiar with iSeries

Services

- [View available boats](#)
- [See boat details - 5250](#)
- [See boat details - Host Publisher](#)
- [See boat details - WebFacing](#)
- [Order a boat](#)

Work with invoices

- [Check messages](#)
- [Check system messages](#)
- [Administrator tasks](#)
- [Manage incoming items](#)
- [Monitor jobs](#)

This Week's Special

Beautifully maintained 28 foot 1978 Carver Santa Cruz for only \$23,900. Head and galley refurbished in 2001. Only 31 hours on completely rebuilt motor. Click [here](#) to see this boat cruising the seas.

Great Deals

For those bargain conscious among you, we have a large selection of new and slightly used boats for under \$75,000. Whether you are planning on sailing in your backyard pond or navigating the mighty Mississippi we can meet your wants, needs, or desires. [View our selection of modestly priced boats.](#)

Site Support

Your comment know if you ha you in any way BOATHELP.

Weather Co

Is it a great da forecast.

Access for Web provides:

- Access to functions not available in the other products
- Could be used as 'entry' point to iSeries



Boats Application - iSeries Access for Web 5250 interface

Could use iSeries
Access for Web 5250
interface

Or HATS LE

Boats application - WebFacing

Services

- [View available boats](#)
- [See boat details - 5250](#)
- [See boat details - Host Publisher](#)
- [See boat details - WebFacing](#)
- [Order a boat](#)
- [Work with invoices](#)
- [Check messages](#)
- [Check system messages](#)
- [Administrator tasks](#)
- [Manage incoming items](#)
- [Monitor jobs](#)

Boats - Microsoft Internet Explorer

Address: http://iseriesd.dfw.ibm.com:2014/boats/WFLogon

Boats

AS/400 WSG Boat Demo 10/03/02 20:36:37

Enter your search parameters

Type: P=Powered, S=Sailing, T=Tug, C=Commercial, A=All

Length (feet): feet to start from

Year built: year to start from

Could reface application using IBM WebFacing Tool

Or modernize with HATS

JK Enterprises

Delivery Schedule

Day	Mon	Tue	Wed	Thu	Fri	Sat	Sun
11	11	11	11	11	11	11	11
12	12	12	12	12	12	12	12
13	13	13	13	13	13	13	13
14	14	14	14	14	14	14	14
15	15	15	15	15	15	15	15
16	16	16	16	16	16	16	16
17	17	17	17	17	17	17	17
18	18	18	18	18	18	18	18
19	19	19	19	19	19	19	19
20	20	20	20	20	20	20	20
21	21	21	21	21	21	21	21
22	22	22	22	22	22	22	22
23	23	23	23	23	23	23	23
24	24	24	24	24	24	24	24
25	25	25	25	25	25	25	25
26	26	26	26	26	26	26	26
27	27	27	27	27	27	27	27
28	28	28	28	28	28	28	28
29	29	29	29	29	29	29	29
30	30	30	30	30	30	30	30
31	31	31	31	31	31	31	31

Boats applications - Host Publisher

Services

- [View available boats](#)
- [See boat details - 5250](#)
- [See boat details - Host Publisher](#)
- [See boat details - WebFacing](#)
- [Order a boat](#)
- [Work with invoices](#)
- [Check messages](#)
- [Check system messages](#)
- [Administrator tasks](#)
- [Manage incoming items](#)
- [Monitor jobs](#)

BOATS OF THE SEVEN SEAS

Select:

Type of Boat	Minimum Length	Earliest Year Built
All Boats	DON'T CARE	DON'T CARE
Commercial	10	1940
Sailing	20	1950
Tug	30	1960
Power	40	1970
	50	1980
	75	1990
	100	2000
	200	
	300	

Process Data Clear Data

Could completely reface application using WebSphere Host Publisher

Main Features	iSeries Access for Web	Host Publisher	WebFacing	HATS
Web-enables existing Applications	Yes	Yes	Yes	Yes
Based on Java technology	Yes	Yes	Yes	Yes
Presentation	HTML, JSPs and Servlets	HTML, JSP and Java Script	HTML, JSP and Java Script	HTML
Runtime Environment	<ul style="list-style-type: none"> • WAS • ASF Tomcat 	<ul style="list-style-type: none"> • WAS 	<ul style="list-style-type: none"> • WAS 	<ul style="list-style-type: none"> • WAS
Supported Browsers	<ul style="list-style-type: none"> • MS Internet Explorer 5.0 • Netscape 4.7 (AIX, Linux) and 6.2 (Windows) • Opera 5.0 (Linux), and 6.0 (Windows) 	<ul style="list-style-type: none"> • MS Internet Explorer 5.0 • Netscape 4.x or later versions 	<ul style="list-style-type: none"> • MS Internet Explorer 5.0 or later versions 	<ul style="list-style-type: none"> • MS Internet Explorer 5.0 • Netscape 4.x or later versions
Interactive Feature Required	No - unless using 5250	Yes	No - with V5R2 and new hardware	Yes
Supported Host Interfaces	5250	5250, 3270, VT52, VT100, VT220	5250 - from DDS Source. Source must be available for each screen format	5250, 3270
Web-enables System Functions	Yes	Yes	No - limited support for selected commands in WDS V5	Yes
SQL Database Access	Yes	Yes	No - except through application changes	No - except through application changes

Main Features (continued)

	iSeries Access for Web	Host Publisher	WebFacing	HATS
Host Application modernization	No, other than runs in browser	Yes	Yes	Yes
Code Changes Required	No	No	No - although may choose to optimize for the Web	No
Programming effort to convert host interface to Web interface	None	Using Studio: 1. Record host screen navigations and create IOs that encapsulate those navigations. 2. Build JSP pages that require IO input and render IO output	None - unless DDS keywords are not supported by WebFacing	Two methods: 1. default parameters - no pgming effort 2. customization - tracing application execution path, defining rules
Customization	Can customize what iSeries functions user can access	Yes - JSP pages can be customized, and IOs can be reused in a WAS application (Servlet, Web Services, EJB)	1. CODE designer 2. Cascading style sheets 3. Web Tools	1. Web Tools
Allows exposure of Java artifacts to other tools	No	No	Yes	No - may create Java extensions to the application
Merge/split of application screens	No	Yes - handled by macro recorder	Yes -with programming changes	Yes - handled by macro recorder

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IBM	

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