



IBM eServer™ iSeries™

A Critical Comparison of IBM refacing tools

Moving to ebusiness

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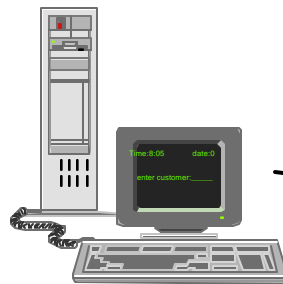
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make available any products referred to herein.

IBM eServer iSeries



What you may be doing today...

**Green
Screen
interfaces...**



- 5250 terminal

LOB applications

- RPG, COBOL,
CL

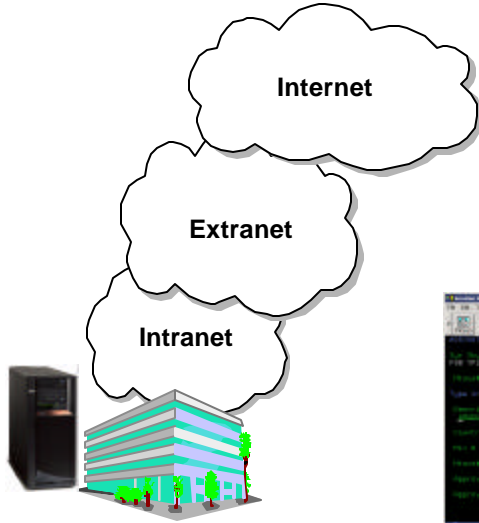
Data Access



intranet

- PC with 5250 emulation
- Running Windows O/S

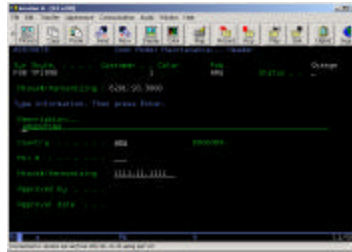
What are your immediate considerations / needs?



iSeries needs further reach...

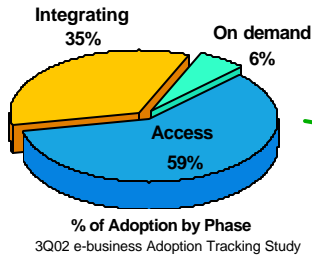
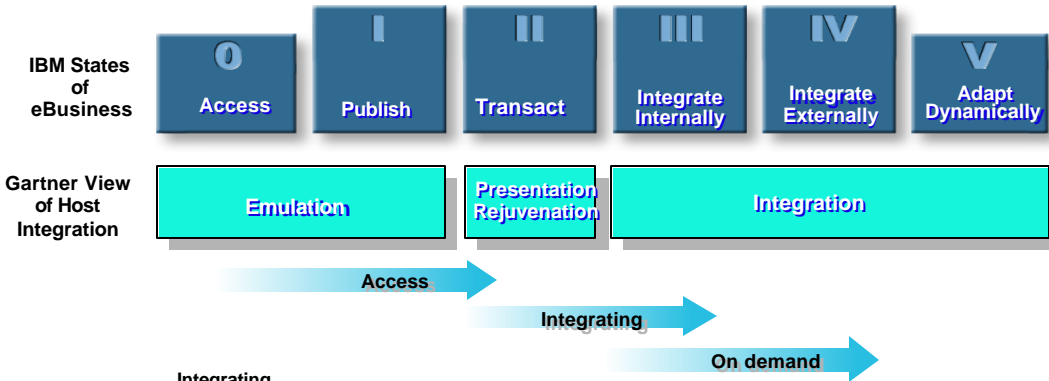


- Tired of installing/upgrading software on PCs in your network...



- Want more than a Windows emulator view

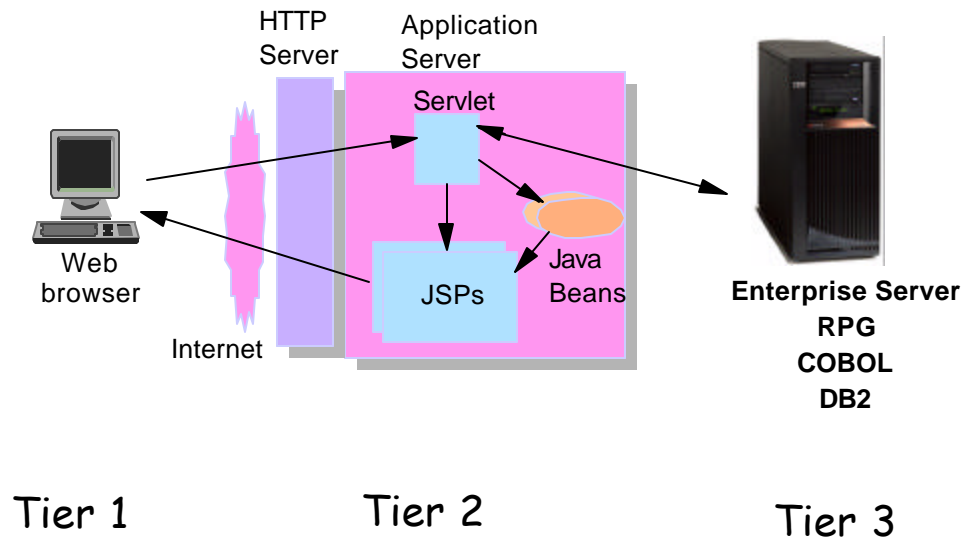
ebusiness adoption ...



3Q02 e-business Adoption Tracking Study

▶ 59% of companies are still in the early phases of e-business deployment

First you need a Web application server...



Web application servers

There are several Web applications servers that can run on iSeries:

- WebSphere Application Server Version 5.0 Express for iSeries
 
 - 300 CPW
 - 512 MB memory
- WebSphere Application Server Version 5.0 Base
- WebSphere Application Server Version 5.0 Network Deployment
- WebSphere Application Server Advanced Edition Single Server V4
- WebSphere Application Server Advanced Edition V4
- WebSphere Application Server Standard Edition V3.5
- WebSphere Application Server Advanced Edition V3.5
- ASF Tomcat (included in IBM HTTP Server for iSeries)
 
 - 70 CPW
 - 256 MB memory
 - The ASF Tomcat web application server is part of the no-charge IBM HTTP Server for iSeries.
 - ASF Tomcat PTFs are delivered within the IBM HTTP Server for iSeries Group PTFs.

The Application Server Is Key to the Solutions

	Tomcat	Express	Base	Network
iSeries Access for Web				
HATS / HATS LE				
Host on Demand	Not Required	Not Required	Not Required	Not Required
Host Publisher				
IBM Telephone Directory				
WebSphere Commerce				
WebSphere MQ	Not Required	Not Required	Not Required	Not Required
WebSphere Portal Server				

Is there a 'fast' way to get into ebusiness?

Can't set out to re-write all applications at once

- Tools / products still evolving
- Changing / new technologies

Need a tactical plan

- To meet short-term objectives
- May choose a short-term solution

Need a strategic plan

- How technology/implementation will affect your business
- How to get a competitive edge on your competition
- Need to look past the issues of cost and installation
- May be opportunity to re-evaluate things such as database design, security, application development



A good start...



+





=



iSeries
Access Family

Start simple...Grow fast...

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 5724-B81, V4.01 WebSphere Host Publisher 	<ul style="list-style-type: none"> 5648-E25, V3.5 5724-B81, V4.01 WebSphere Host Publisher
<ul style="list-style-type: none"> 5724-D34-01 HATS Limited Edition 	<ul style="list-style-type: none"> 5724-D34-01 HATS Limited Edition
	Customers with Software Subscription can get V5R2 clients by ordering no-charge Feature No. 2645 of Product No. 5722-XW1
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	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

What is HATS LE?

Host Access Transformation Server Limited Edition (HATS LE)



Part of iSeries Access Family - 5722-XW1



▪ Available 6/30/03

- ▶ Automatically ships with new orders for 5722-XW1
- ▶ Existing iSeries Access Family customers (at V5R1 or V5R2) 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

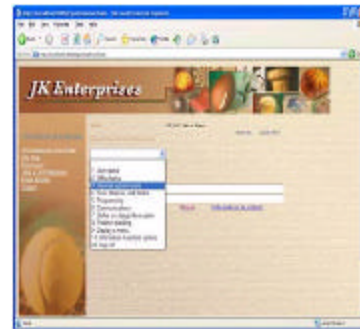
- ▶ Stock Templates included so you can quickly personalize your web page to your company look and feel

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

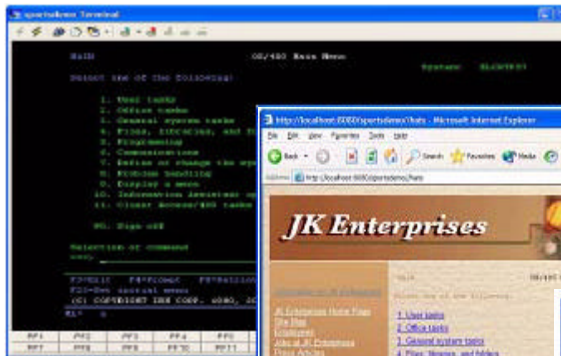
No programming necessary

- ▶ Doesn't break if changes are made to 5250 application
- ▶ No need to access source code



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

HATS LE: Real-time Screen Conversion

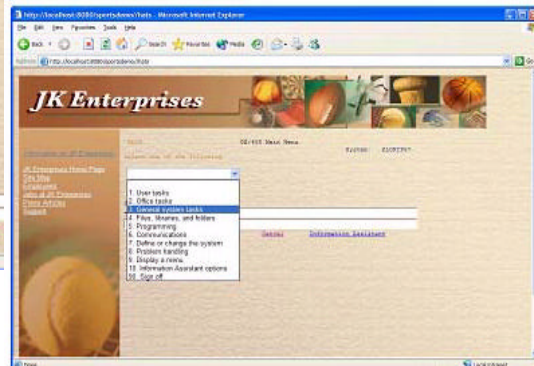


Traditional green screen



Drop-down menu

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



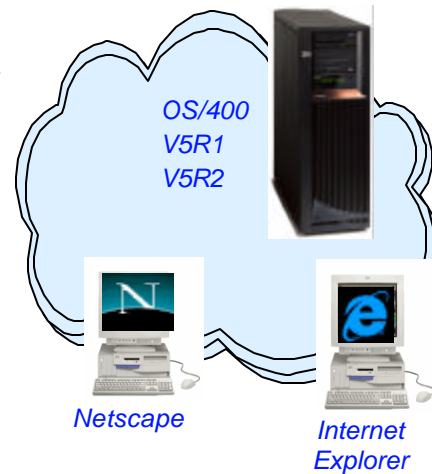
Client and Server Requirements

HATS LE can be installed on iSeries on any of the following web application servers:

- ▶ 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

HATS LE can be accessed from any of the following browsers:

- ▶ Netscape 6.0 or later
- ▶ Internet Explorer 5.0 or later
- ▶ Netscape 4.72
 - Function keys not supported



Can run on any desktop operating system that has Netscape or Internet Explorer supported browsers

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

Portlet Support

HATS LE does not run in the WebSphere Portal Server. You need to upgrade to HATS to take advantage of portlets.

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.

Getting Started

Install the HATS4LE.ear file on your iSeries server

- HATS LE is shipped on a separate CD called "iSeries Access Refresh - Host Access".HA
- Start the WebSphere Administrative Console, find the HATS4LE.ear file and install it under WAS
- Can configure HATS LE



HATS LE - Configuration

Connection Settings

- **Host name**
 - ▶ Put the iSeries name in here that you want users to connect to. Doesn't have to be system where WAS or HATS LE is running
- **Port**
- **Code page**
- **Workstation ID**
 - ▶ Server assigned (default)
 - ▶ Set to a value
 - ▶ Set from an HTTP session variable
 - ▶ Prompt user
- **Security - SSL**

1

Address <http://hatsdev.raleigh.ibm.com/HATSLE/config>

Configure Connection Settings <http://serverName/HATSLE/config> Help ?

Configure your host connection settings. Click Finish if you have finished configuring your application, or Next to continue to the next step. For more information, click the Help icon above.

Host name:	<input type="text" value="MyiSeries"/>
Port:	<input type="text" value="23"/>
Code page:	424 Hebrew (New Code)
<input checked="" type="checkbox"/> Enable screen reverse	
Workstation ID:	<input checked="" type="radio"/> Server assigned <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 checked="" type="checkbox"/> Allow workstation ID parameter override in URL	
Security:	<input type="checkbox"/> Enable SSL (Secure Sockets Layer) Certificate file: <input type="text"/> <input type="button" value="Upload..."/>

HATS LE - Select a Template

Select a Template

Select a template for your application. Click **Finish** if you are done configuring your application, or **Next** to continue to the next step.

- Blank.jsp
- ClassicTerminal.jsp
- CorporateBanner.jsp
- iSeriesAccess.jsp
- Sports.jsp
- crminer.jsp
- crminer2.jsp

Show application keypad
 Show host keypad
 Allow users to interact with the host using their keyboards

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

Templates included in HATS LE

- Templates have different characteristics
- Can add own templates to list

Keypads,
keyboard
functions

HATS LE - define end user 'look and feel'

Transformation features include detection of:

- Function (PF) keys on the host screen
- Selection lists
- Tables
- Subfile rendering
- Preserves Field colors

Can also configure:

- What determines a PF key on the host screen (ie, delimiters, etc) and how those PF keys will be rendered (either as buttons or links).
- How to display selection lists (ie, button, button table, pulldown list, link, option list)

Transformation Settings

Select how to render your transformed host screens.

<input checked="" type="checkbox"/> Detect PF keys	Settings...
<input checked="" type="checkbox"/> Detect selection lists	Settings...
<input type="checkbox"/> Detect tables	Settings...
<input checked="" type="checkbox"/> Detect subfiles	
<input checked="" type="checkbox"/> Preserve field colors	
Use character by character rendering:	Never

Back Next Finish Cancel

Newly created template...

Different default settings

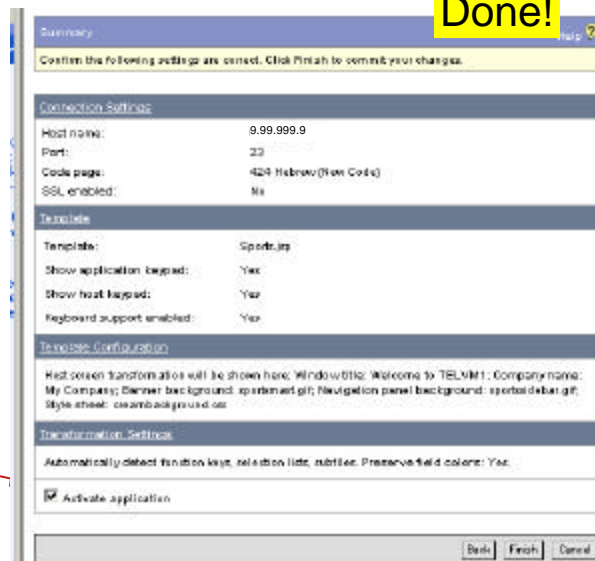
- Links, Pulldowns, Buttons, Option lists...
- Different Keypads



HATS LE - Configuration Summary

Review the configuration settings you have selected

If you have the 'Activate Application' box checked, then as soon as you press the 'Finish' button, users will be able to start accessing your iSeries through HATS LE



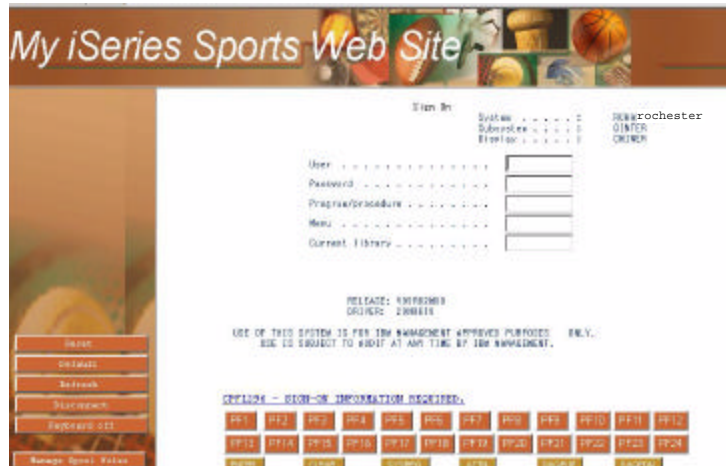
Users can now access iSeries through HATS LE

End user connects to HATS LE by navigating to a URL:

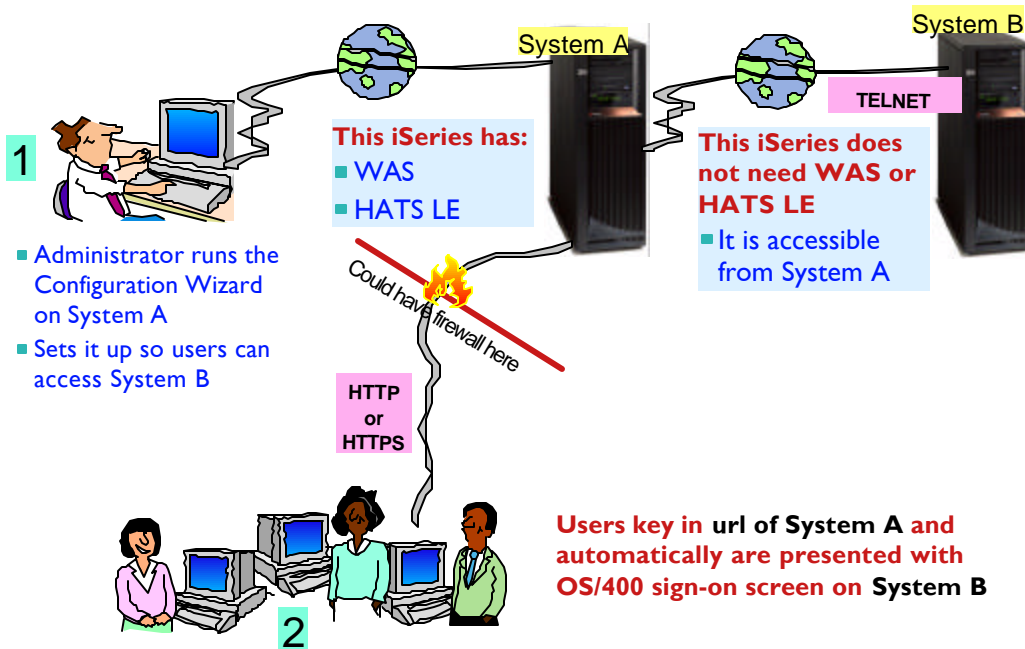
<http://serverName/HATSLE/entry>

- or simply

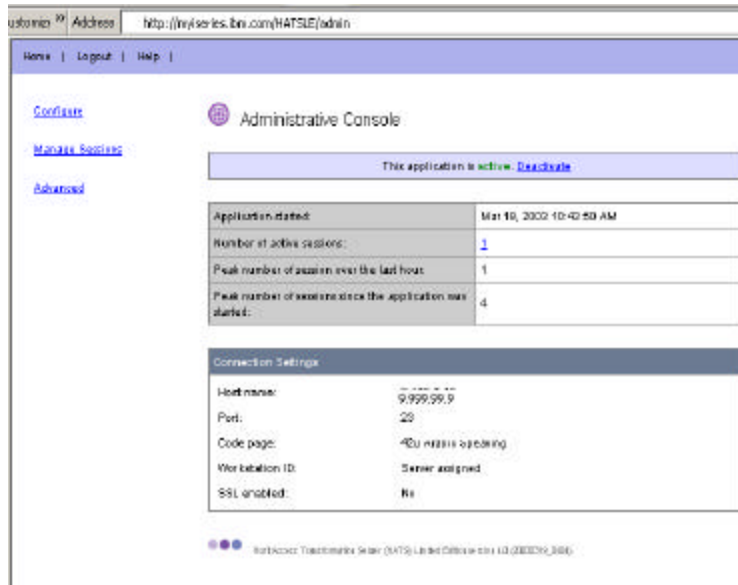
<http://serverName/HATSLE>



Can set up to connect to any iSeries...



HATS LE - Administrative Console



A web-based tool to:

- ▶ Manage active connections
- ▶ Tweak configuration changes
- ▶ Activate/deactivate the application
- ▶ Launch the Configuration Wizard

Different than the WAS administrative console

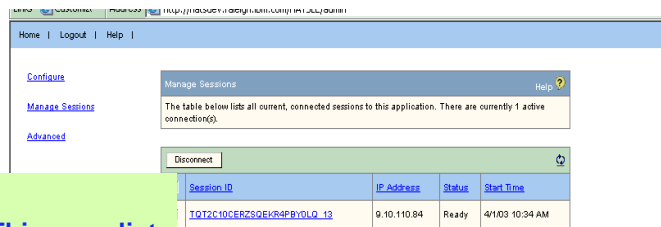
Requires SECADM authority

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

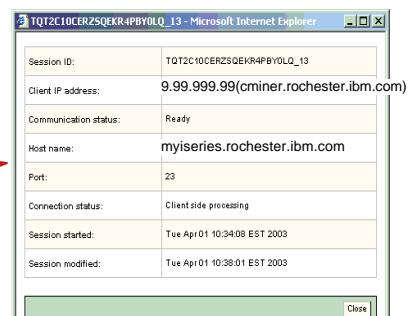
Manage Sessions

From this page you can:

- Review the list of users connected to HATS LE
 - ▶ Click the refresh icon to refresh the list.
 - ▶ Sort the list by any column by clicking the column heading
- Click a session ID to view detailed information about the session.
- Disconnect a session
 - ▶ Check the box on the line representing that session and click Disconnect
 - ▶ You can select all the sessions by checking the box in the title bar



This page lists the sessions connected to your application.



Summary - HATS LE

Pro's	Con's
<ul style="list-style-type: none">✓ <i>Easy to install and configure</i>✓ <i>5250 access only</i>✓ <i>Provides a high level of GUI look and feel with no programming</i>✓ <i>Covered by iSeries Software Maintenance</i>	<ul style="list-style-type: none">✓ <i>Does not provide refactoring for individual host applications</i>✓ <i>Requires 5250 OLTP</i>✓ <i>iSeries only</i>
<p>Best Use: End user 5250 access to iSeries through a browser</p>	



*Start simple...
Grow fast...*



Why use Access for Web...

iSeries customers

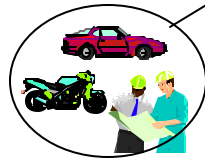
who:

- Want **no special software installed on their desktops**
- Want access from a **variety of desktop operating systems**
- Want **simple Internet access to their iSeries**
- Want **no special firewall settings for user access**
- Want to use **familiar browser functions like Cut & Paste, Print, ...**

Sales people can deploy parts orders & warranty filing system to distributors across an extranet



Dealers can order parts or check inventory online



Agents & brokers can check policies, claim status, and accounts receivable on the Internet



Doctors & clinicians can enter lab orders and review test results anytime from anywhere

Firewall



iSeries Access for Web capabilities / advantages...

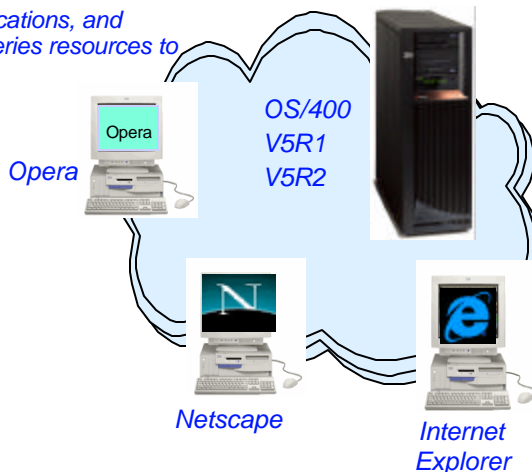
End users can leverage business information, applications, and resources across an enterprise by extending the iSeries resources to the client desktop through a web browser

Provides access to iSeries through a browser

- 5250 access
- Access to database, integrated file system, printers, output queues, jobs
- Can run batch commands and send/receive messages

It has the following advantages:

- Is server based
- Requires only a browser on the client, no configuration required at desktop, no applets installed on desktop
- Uses industry standard protocols - HTTP, HTTPS and HTML



Notes: What is iSeries Access for Web?

iSeries Access for Web

iSeries Access for Web is a lightweight, browser-based access to your iSeries servers

Pure Java servlet-based access

- iSeries Access for Web is a set of servlets that run on the iSeries servers as extensions to the HTTP server. It provides access to functions such as database, file, print, and messages on the iSeries server.

Industry-standard protocol

- iSeries Access for Web uses the industry standard HTTP and HTTPS protocols and does not use any proprietary TCP/IP ports and protocols. Firewall issues are much more manageable as a result.

Lightweight Access

- The intent of iSeries Access for Web is lightweight and casual access of iSeries servers from a web browser. Most of the iSeries Access for Web functions have minimal browser requirements and would work with almost any browser on any platform.

Server-based

- iSeries Access for Web is entirely server based. There is no client code to install and manage. Simply install and configure on the server, access from any web browser.

Object-level security

- Access to the iSeries data is based on iSeries object level security. Users and groups have only access to the data they are authorized to.

Fully customizable

- Access to iSeries Access for Web functionality can be restricted for users and groups of users. iSeries Access for Web is fully customizable.

HTML and other internet mime types

Responses from the iSeries Access for Web servlets are formatted and tagged with the appropriate mime types. Some of the mime types used are (others may be used and added in the future):

- HTML (text/html)
- binary (application/octet-stream)
- text (text/plain)
- MS Excel (application/vnd.ms-excel)
- Lotus 1-2-3 (application/vnd.lotus-1-2-3)
- GIF images (image/gif)
- TIFF images (image/tiff)
- HP PCL (application/vnd.hp-PCL)
- AFP (application/vnd.ibm.modcap)

In most cases, the request implies the resulting data type. iSeries Access for Web servlets retrieve the data, format the data in appropriate formats, tags it with the appropriate mime type, and sends the response back to the client

Browser Requirements for Access for Web

Netscape

- Version 4.7 (AIX[®], Linux)
- Version 6.2 (Windows)

Microsoft[®] Internet Explorer

- Version 6.0 (Windows)

Opera

- Version 5.0 (Linux)
- Version 6.0 (Windows)

Can be used on any workstation operating system that supports one of these browsers:

- ▶ Windows
- ▶ Linux
- ▶ Macintosh
- ▶ UNIX....



Other browsers (for these and other platforms) that support the current HTTP and HTML specifications should work but have not been tested with iSeries Access for Web.

Getting Access for Web installed & running...

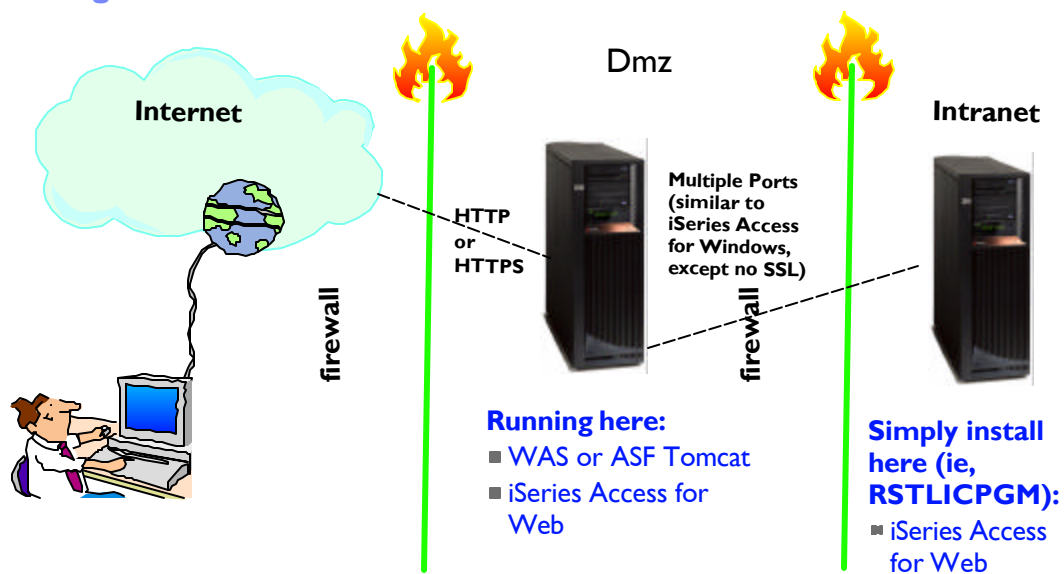
How is iWA installed and configured on the iSeries server

To get iSeries Access for Web installed and running on the iSeries server, a series of steps must be performed. These steps are outlined in great detail in the iSeries Access for Web Setup & Users Guide. To help you understand what these steps are, below is a highlevel summary of the steps it takes to get iSeries Access for Web up and running...

1. Run **RSTLICPGM** server command to install iSeries Access for Web on the iSeries server.
2. Load/Apply any iSeries Access for Web PTFs, and any other dependent product PTFs.
3. Perform HTTP server setup (if not already done).
4. Perform Web application server setup (ie, WebSphere Application Server or Tomcat)(if not already done).
5. Run iSeries Access for Web CL command **CFGACCWEB2** is run to configure iSeries Access for Web within the Web application server.
6. On WebSphere Application Server Advanced Single Server Edition V4.0 and ASF Tomcat, iSeries Access for Web starts when the Web application server is started
7. On WebSphere Application Server Advanced Edition V4.0, you must additionally run the iSeries Access for Web CL command **STRACCWEB2** to start iSeries Access for Web.

Now when Web browser user invokes URL `http://<server_name>/webaccess/iWAHome`, they are using iSeries Access for Web

Using a Dmz*



*Dmz = Demilitarized Zone

Port Requirement Comparison

iSeries Access for Windows (5722-XEI)*

- Port 449 for Port Mapper
- Port 8476 (9476) for Sign-on
- Port 8470 (9470) for Central
- Port 8472 (9472) for Data Queues
- Port 8471 (9471) for Database
- Port 8475 (9475) for Remote Commands
- Port 8473 (9493) for Print
- Port 2001 (2010) for Web Admin
- Port 446 (448) for DDM
- Port 23 (992) for Telnet
- Port 137, 138 for NetServer
- Port 8480 for USF
- Port 389 (636) for LDAP
- Port 5555 (5566) for Mgmt Central
- Port 53 if using DNS Server

iSeries Access for Web

- HTTP (Port 80 default or any port)
- Port HTTPS Port 443 or any port)

* See Information APAR III2227 for detailed information

Access for Web can be the window to iSeries resources

Different look/interface for different browser users

iSeries Access for Web

- **Shipped/Default method of accessing iSeries resources**

 - ▶ For a more experienced iSeries end user, this provides a highly productive interface for working with all iSeries resources

- **Customize user 'window' to iSeries**

 - ▶ For the inexperienced user -- and to tightly control exactly what functions a user can perform on your iSeries -- as easy-to-use Customization function enables iSeries administrators to create unique 'windows' to the iSeries.
 - ▶ These are associated with OS/400 profiles -- thus an administrator could create many different 'windows' for different types of users.



Multi-Function Interface

My Personal Folder

Print

- ▶ Printer output
- ▶ Printers
- ▶ Internet Printers
- ▶ Printer shares
- ▶ Output Queues

Database

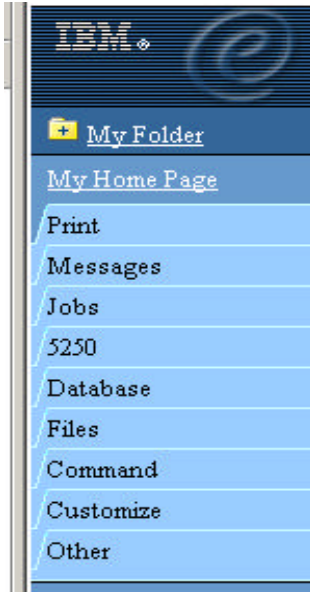
- ▶ Tables
- ▶ My Requests
- ▶ Run SQL
- ▶ Copy Data to Table
- ▶ Import Requests

5250

- ▶ Start 5250 Session

Commands

- ▶ Run commands (Batch)



Files

- ▶ Browse Files (in IFS)
- ▶ File Shares (in NetServer)

Messages

- ▶ Display Messages
- ▶ Send Messages
- ▶ Operator Messages
- ▶ Message Queue

Jobs

- ▶ User Jobs
- ▶ Server Jobs

Customize

- ▶ Administrator controls access to functions by user or group of users:
 - Customize front page
 - Limit tasks that can be performed

Consistent Functionality

iSeries Access for Web



Services

- [See boat details - 5250](#)
- [See boat details - WebFacing](#)
- [See boat details - Host Publisher](#)
- [View available boats](#)
- [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 comments are important to us. Please let us know if you have any questions or if we can help you in any way. Address your message to user BOATHELP. [Send us a message](#)

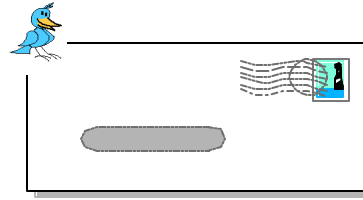
Weather Conditions

Is it a great day for boating? Check out today's forecast.



e-Mail - V5R2

Ability to 'e-mail' results as attachment



- **Can send results to a recipient with status sent to sender for:**
 - A database (SQL) action
 - CL command
 - File command
 - PDF view of print information

- **A one-step way to distribute information across the network, and particularly useful when recipient is:**
 - Not an iSeries user
 - Does not have access to a web browser

Set up my session for e-mail capability...

IBM eServer iSeries Access for Web

cmminer RCHAS1DD.RCHLA

My Folder

My Home Page

Print

Messages

Jobs

5250

Database

Files

Command

Customize

Preferences

User profiles

Group profiles

Selected profile

Other

Related Links:

Customize - Mail

Profile: CMINER

Policy	Derived From	Action	Setting
Send mail	Shipped default	Use current setting	Allow
SMTP mail server 1	Profile setting	Use current setting	us.ibm.com
E-mail address 2	Profile setting	Use current setting	cmminer@us.ibm.com
E-mail address is user preference	Shipped default	Use current setting	Allow

OK Cancel

1. To set up SMTP server setting:

- Use *PUBLIC to set up same address for all users
- If blank, Access for Web will use information in SDD

2. e-Mail address must be set for each user

Printer Output screen

1

2

3

File Name	User Data	Creation Date/Time	Pages Per Copy	Copies	Status	Action	Preview	User
QPDPSPST		1/2/03 7:22 AM	1	1	Ready	Hold Print Next Delete PDF GIF TIFF PCL AFP Viewer	PDF GIF TIFF PCL AFP Viewer	WUSEI
QPRTSPLQ		1/2/03 8:09 AM	1	1	Ready	Hold Print Next Delete PDF GIF TIFF PCL AFP Viewer	PDF GIF TIFF PCL AFP Viewer	WUSEI
QPDPSPST		1/13/03 8:54 AM	1	1	Ready	Hold Print Next Delete PDF GIF TIFF PCL AFP Viewer	PDF GIF TIFF PCL AFP Viewer	WUSEI
QSYSPRT	WRKSYSVAL	1/2/03 8:04 AM	3	1	Ready	Hold Print Next Delete PDF GIF TIFF PCL AFP Viewer	PDF GIF TIFF PCL AFP Viewer	WUSEI
QPDPSPST		1/14/03 2:30 PM	1	1	Ready	Hold Print Next Delete PDF GIF TIFF PCL AFP Viewer	PDF GIF TIFF PCL AFP Viewer	WUSEI
QSYSPRT	WRKSYSVAL	1/2/03 8:04 AM	3	1	Ready	Hold Print Next Delete PDF GIF TIFF PCL AFP Viewer	PDF GIF TIFF PCL AFP Viewer	WUSEI
QPDPSPST		1/16/03 8:52 AM	6	1	Ready	Hold Print Next Delete PDF GIF TIFF PCL AFP Viewer	PDF GIF TIFF PCL AFP Viewer	WUSEI

View output in PDF



To: Joe Customer
 1234 Beach Street
 Hometown, CA 12345

Date: Thursday, June 13, 2002

Invoice No.: 9876543

Payment Due: Monday, July 15, 2002

Description	Part No.	Quantity	Price	Amount
Hunter 33.5	004356	1	\$57,900.00	\$57,900.00
Boat trailer	199234	1	\$1,800.00	\$1,800.00
Boat anchor	043993	1	FREE	\$0.00
			Subtotal	\$59,700.00
			Tax	7.00%
			TOTAL	\$63,879.00

Select Mail Option for Printer Output (PDF)...

PDF Output Settings

PDF device type: *IP40300

Drawer 1 paper size: *LETTER

Drawer 2 paper size: *LETTER

Destination: Browser

Restore original print job

Device Type Details

*IP40240

Specifies the type of printer device that the IPDS to PDF transform will emulate.

The transform will emulate an Infoprint 40 printer device at 240 dots per inch resolution. The transform works like a TCP/IP connected 240 dpi IPDS Infoprint 40 with the 4820...

Address your e-mail...see PDF attachment there...

iSeries Access for Web

cmner

Mail as Attachment Settings

From: cmner@us.ibm.com

To: smshao@us.ibm.com

cc:

bcc:

Subject: Today's Job Log

Here's the information you requested.

Attachment: QPJOBLOG.244790.CMNER.QDFTJOB.D.1.PDF

OK Cancel

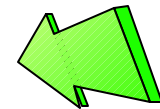
Who will benefit from iSeries Access for Web...

- Any iSeries customer -- **with any hardware model** - can quickly get started working in a Web environment
 - ▶ If your system is not capable of running WAS, you can easily install the ASF Tomcat web application server. ASF Tomcat runs on hardware with 70 CPW and 256 MB memory
- Any iSeries customer -- **with little Web experience** - can easily get started working in a Web environment
 - ▶ iSeries Access for Web is simple to install and configure
 - ▶ There is no programming skills required to set it up
- Any iSeries customer -- **with no training or setup on users' desktops** - can extend the reach of iSeries resources to your end users
 - ▶ Use customize facility to set up view ('window') to iSeries and to control access to various iSeries resources
 - all built around OS/400 user profiles
 - ▶ Uses standard HTML, uses existing HTTP/HTTPS ports

A great first step to get your iSeries into e-business

Reference Material

Can get to all documents from iSeries Access web page
www.ibm.com/eserver/iseries/access/web



- **iSeries Access for Web, Version 5, SC41-5518**
 - Setup and Installation information
 - Users Guide
- **URL Interfaces to iSeries Access for Web**
 - Sample Code and examples on how to build links to directly access iSeries Access for Web functions and your other programs
- **Redbook: iSeries Access for Web V5R2 and WebSphere Host Publisher**
 - Examples include how to customize Web page for your company, how to access other iSeries servers, etc

Summary - iSeries Access for Web

Pro's	Con's
<ul style="list-style-type: none"> ✓ Easy to install ✓ 5250 emulator allows for device naming ✓ All functions (except 5250) run as non-interactive workload ✓ Allows access to a variety of iSeries resources ✓ Covered by iSeries Software Maintenance ✓ Supports Tomcat and a variety of browsers ✓ Non invasive - no source required ✓ More individual end user control 	<ul style="list-style-type: none"> ✓ Does not provide refacing for individual host application ✓ 5250 emulator requires 5250 OLTP ✓ iSeries only
<p>Best Use: End user access to iSeries functions through a browser Complements WebFacing, Host Publisher, HATS</p>	

Differences iSeries Access for Web VS HATS LE



iSeries Access for Web provides many functions besides 5250...

My Personal Folder

Print

- Printer output
- Printers
- Internet Printers
- Printer shares
- Output Queues

Database

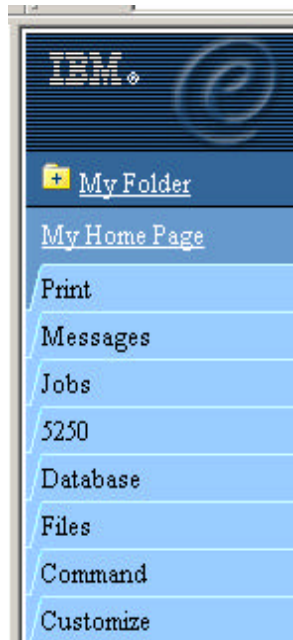
- Tables
- My Requests
- Run SQL
- Copy Data to Table
- Import Requests

5250 ★

- Start 5250 Session

Commands

- Run commands (Batch)



Files

- Browse Files (in IFS)
- File Shares (in NetServer)

Messages

- Display Messages
- Send Messages
- Operator Messages
- Message Queue

Jobs

- User Jobs
- Server Jobs

Customize

- Administrator controls access to functions by user or group of users:
 - Can customize front page
 - Can limit what tasks can be performed

We will look only at differences between the 5250 interface here...

The iSeries Access Family now provides two unique ways to start a 5250 session to an iSeries.

1. Access for Web

- Product 5722-XH2, refreshed in V5R2, and runs on both V5R1 and V5R2 iSeries servers
- Includes a new, integrated, and improved 5250 emulation function.

2. HATS LE

- Offers 5250 emulation that is quick and easy to set up and define
- Runs on both V5R1 and V5R2 iSeries servers.



Differences - iSeries Access for Web vs HATS LE

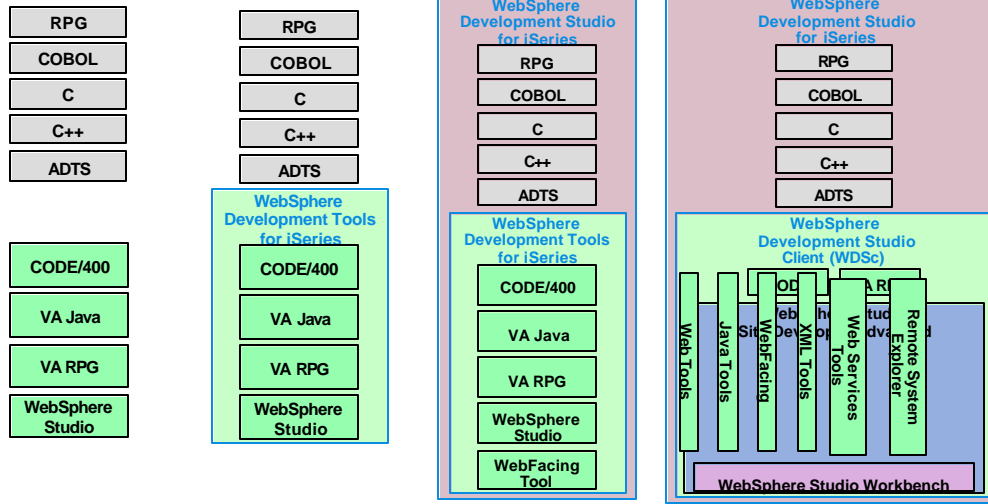
Access for Web (5250 emulation)	HATS LE (5250 emulation)
<p>If using many other Access for Web functions</p> <ul style="list-style-type: none"> • Can select 5250 or other functions from the Navigation Bar. If users need more than 5250, less set-up to use Access for Web for all needs than to also install/set up HATS LE 	<p>Easier to set up if only want 5250 session</p> <ul style="list-style-type: none"> • If the only function you want to make available to users is 5250 emulation, then it would be easier to use HATS LE as that is all the only function it provides. Its Configuration Wizard is easy and quick to set up.
<p>Provides 'Window' to iSeries</p> <ul style="list-style-type: none"> • Has a 'front page' concept (think of portlet) that can be customized by administrator to contain only predefined links to not only Access for Web functions, but other applications, locations, etc 	<p>One customization applies to all users</p> <ul style="list-style-type: none"> • You only need to go through the customization once and it applies to all users connecting to that instance of HATS LE. • In Access for Web, most 5250 customization must be done by end user. Centralized customization will be available in next release of Access for Web (see beta on www.ibm.com/eserver/iseries/access/web)
<p>Can connect to multiple iSeries</p> <ul style="list-style-type: none"> • End user can easily configure multiple 5250 sessions to multiple iSeries servers from single URL. • For HATS LE, the Administrator must go through special setup to enable users to access multiple iSeries servers through multiple URLs. 	<p>Function Keys work with Netscape too</p> <ul style="list-style-type: none"> • HATS LE enables Netscape users, as well as Internet Explorer users, to work with keyboard Function keys • Access for Web only supports use of Enter Key when using Netscape
<p>Includes Macro support</p> <ul style="list-style-type: none"> • The macro support can be used to eliminate the entering of repetitive commands or even bypass the second sign-on screen. • HATS LE has no macro support 	<p>Rules-based transformation capabilities provide a more enhanced GUI-look</p> <ul style="list-style-type: none"> • All system screens and application screens can have drop down lists. HATS LE can detect selection lists and tables and provide an enhanced GUI look not possible with Access for Web 5250 emulation.
<p>iSeries-specific usability functions</p> <ul style="list-style-type: none"> • Can enable 'More...' on a button, cursor positioning help (ie, will perform function that pressing F1, F9, etc would do) 	<p>Templates included</p> <ul style="list-style-type: none"> • Sample templates included, and are easy to modify.



For your iSeries applications...



Evolution of WebSphere Development Studio for iSeries



Product Numbers	Product Names	On Stacked Media	Chargeable Product	Notes
5722-WDS	WebSphere Development Studio for iSeries	Yes	Yes	Customers who have any one development tool and Software Subscription, will receive this product as a no-additional charge upgrade
5722-WDS	WebSphere Development Studio client	No		Receive unlimited entitlement to WDSClient with WDS

WebSphere Development Studio for iSeries

WebSphere Development Studio for iSeries

- Combines Legacy and web development in one offering
 - ▶ Host & client tools
 - ▶ RPG, Cobol, C & C++
 - ▶ Java, HTML, XML, & Web Services
- WebSphere Development Studio Client (WDSClient) is Windows tool bundle
 - ▶ 1 copy of WDSClient is shipped with WebSphere-Express for iSeries



80,000 copies shipped since May 23, 2001!

New plus Advanced Edition coming in April of 2003

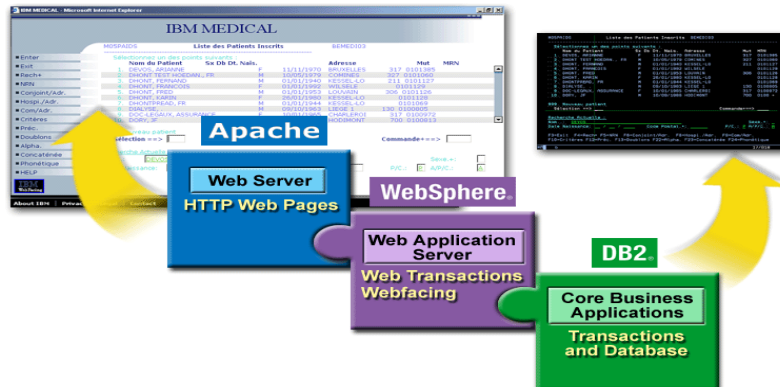
- Support for EJBs
- Struts extensions to the Eclipse IDE
- New WRKSPLF support
- Enhanced DDS keyword support



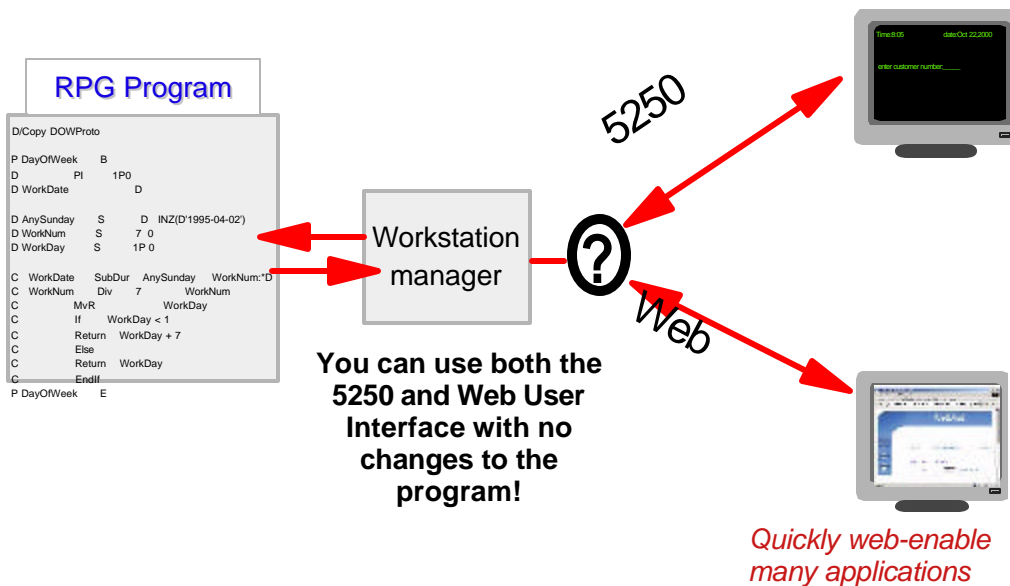
WebSphere Development Studio client for iSeries (WDSc)

Includes IBM WebFacing Tool

- Used to reface and modernize iSeries 5250 applications
- Supports 5250 NPT and browser interfaces
- Quickly convert RPG/5250 applications to Graphical User Interface (GUI)
- New 2003 iSeries hardware (only) does NOT require 5250 OLTP workload!



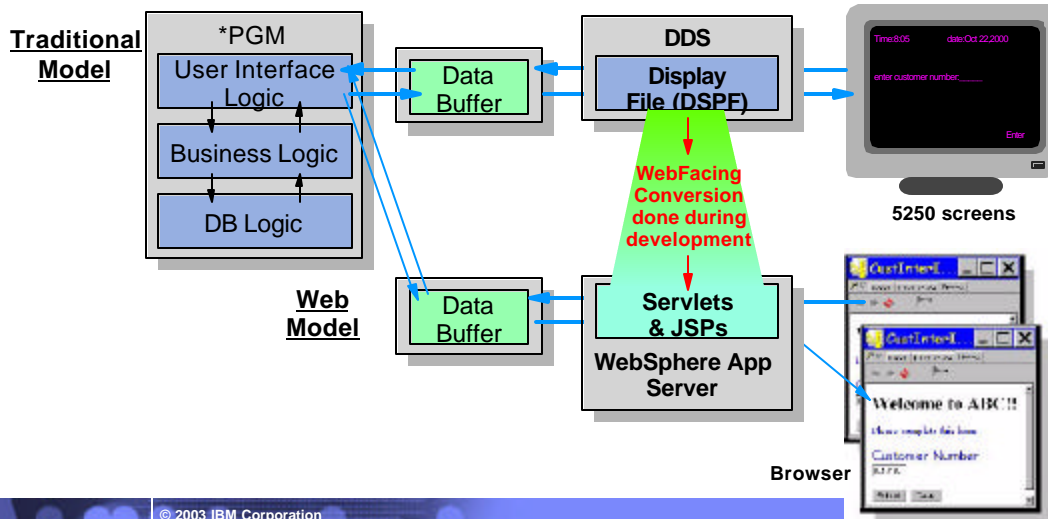
IBM WebFacing Tool...



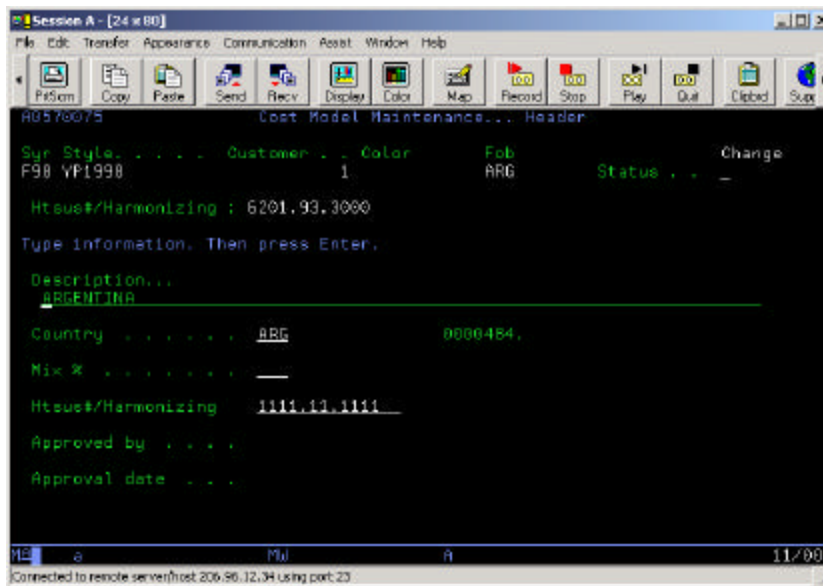
Deeper look at IBM WebFacing Tool...

WebFacing

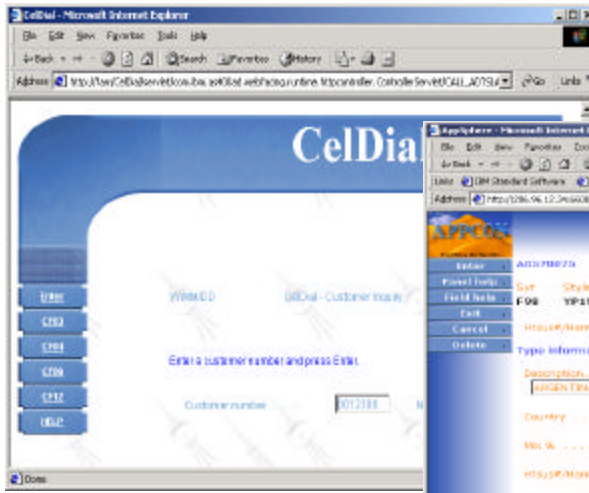
- Converts Display File source (DSPF) to JSPs & Servlets
 - OS/400 decides to create 5250 stream OR Web Interface
- Applications run "as is", no need to change



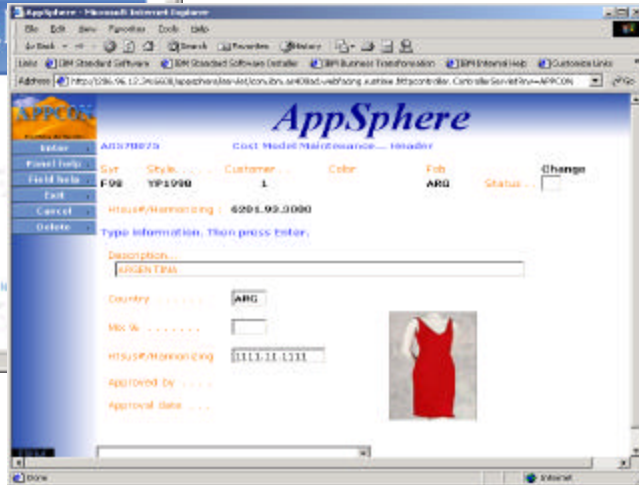
Before WebFacing



After WebFacing



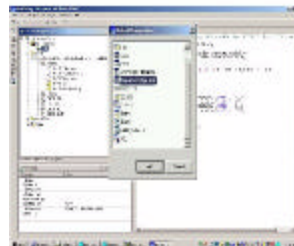
... Like this



Or this ...

Eight Steps to Success

1. Start the IDE
2. Run the Create WebFacing Project Wizard
 - Import DDS Source
 - Specify CL Command Used to Start Application
 - Select GUI Style
3. Convert DDS to JSPs and Beans
4. Update Publishing Information
5. Deploy the Files to WebSphere App Server
6. Ensure WAS is up and running
7. Invoke the first page
8. Iteratively improve look of application



IBM WebFacing Tool included in WDS development environment

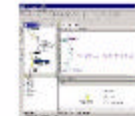
Java



Remote System Explorer



Web



Customers Using WebFacing

For More: www.ibm.com/software/ad/wds400 ->references



Customer Quote - WebFacing

"We knew the value proposition of WebFacing was extremely attractive, but we were absolutely blown away by how easy and quick it was to create web interfaces for our 5250 applications. IBM has a winner!"

Dave Bauer - Architect, Xperia Solutions

Summary - IBM WebFacing Tool

Pro's

- ✓ *Part of WebSphere Dev Studio*
- ✓ *Covered under SW Maintenance*
- ✓ *No 5250 workload on new systems*
- ✓ *Bundled with and works with WAS Express*
- ✓ *Initial conversion is very easy to do*

Con's

- ✓ *Invasive process (conversion)*
- ✓ *Requires DDS source (not dynamic) so no support for system menus and screens*
- ✓ *5250 only*
- ✓ *Gets reasonably technical fairly quickly*

Best Use: Deploy ISV applications to a browser GUI. Leaves open the option of further customization

WebSphere Host Publisher

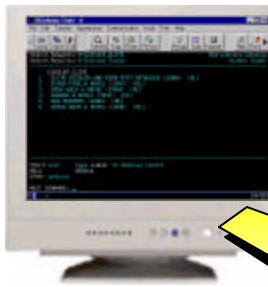


A cross-server product

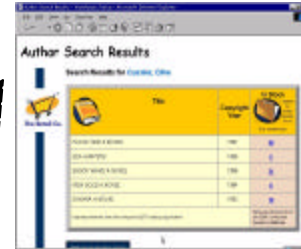
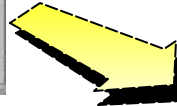
Use your Host Publisher skills to work with iSeries and zSeries applications...

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

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

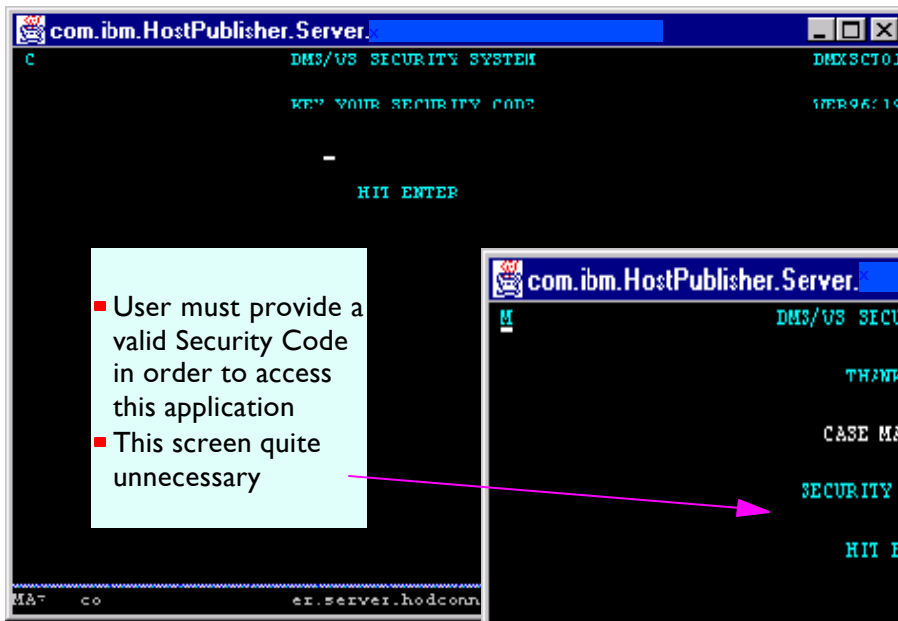
WebSphere Host Publisher offers many capabilities

Extend existing applications to the Web...

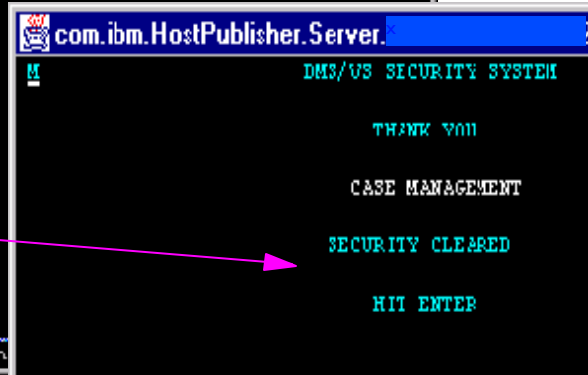
1. **Modernization done without source code**
 - Host application continues to run as it always has...
2. **Can Web-enable system screens**
 - Including iSeries commands (such as query a database file)
3. **Can take an existing full-function, in-house application and present **only selected paths** to 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, failover 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

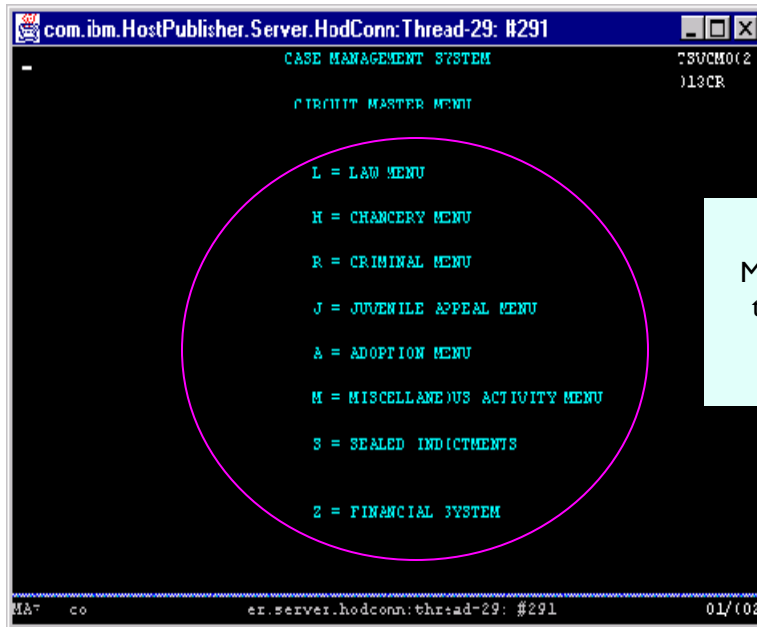
State of Virginia - Host Application



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

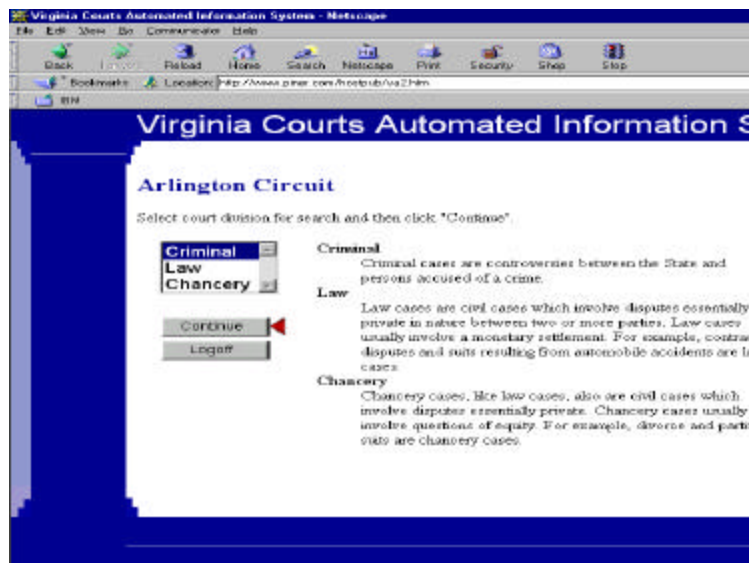


Case Management System



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 VLCD DITCH
By/SI 4/16/96 355 VALPARAISO IN46383
Drain 30 Conserv 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 Wl1 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 5/03 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
ENTER DUP NO F14-C0 F16-D1 F20-SW
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

Porter County Tax Information

Search by Name: SMITH AMOS G JR, B MARJAN
 Search by Address: 4611 POTSDAM PORTAGE

Parcel: 307
 Class: 312
 Mtg: 007
 Dup/SI: 3028770
 Drain/Bk/Pg: 0000/0000
 Class: 3

Block: 343
 Page: 443
 Improvement: 3604
 Tax Sale: 17
 Pre Dupl: 517900
 New Dupl: 0

Legal Description: CAPITOL ROTARIO SYSTEM
 DUEY 2
 LOT 2

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

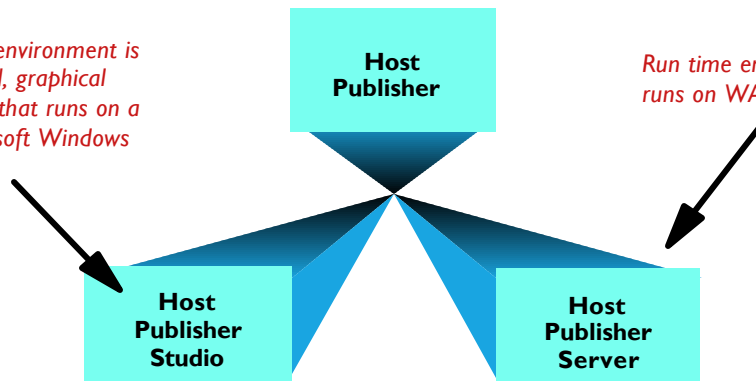
Sharon Lippens, Director, Data Processing, Porter County, Indiana

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

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

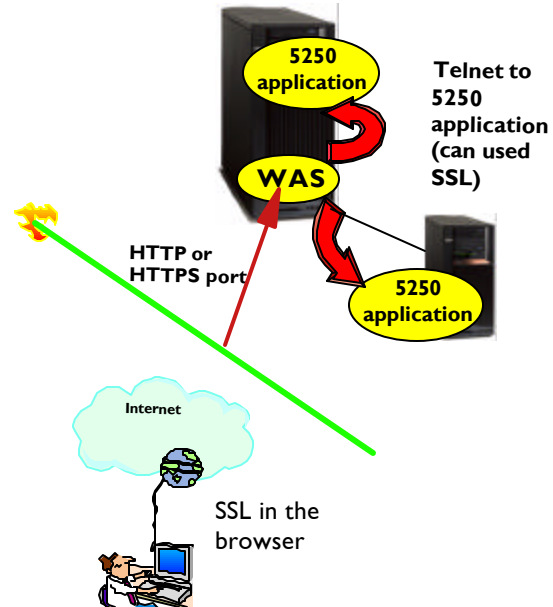
Security Features...

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



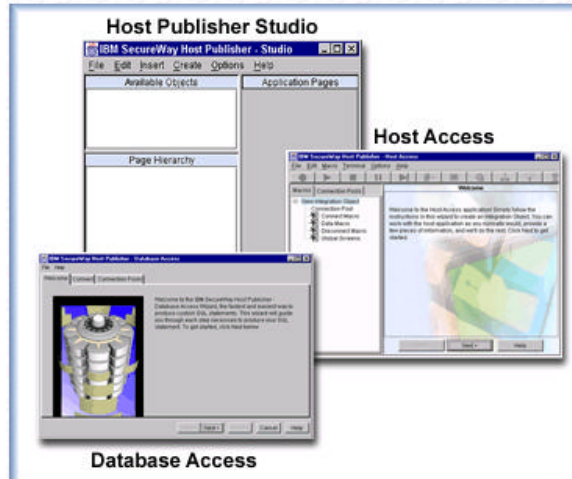
What are the steps?

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**

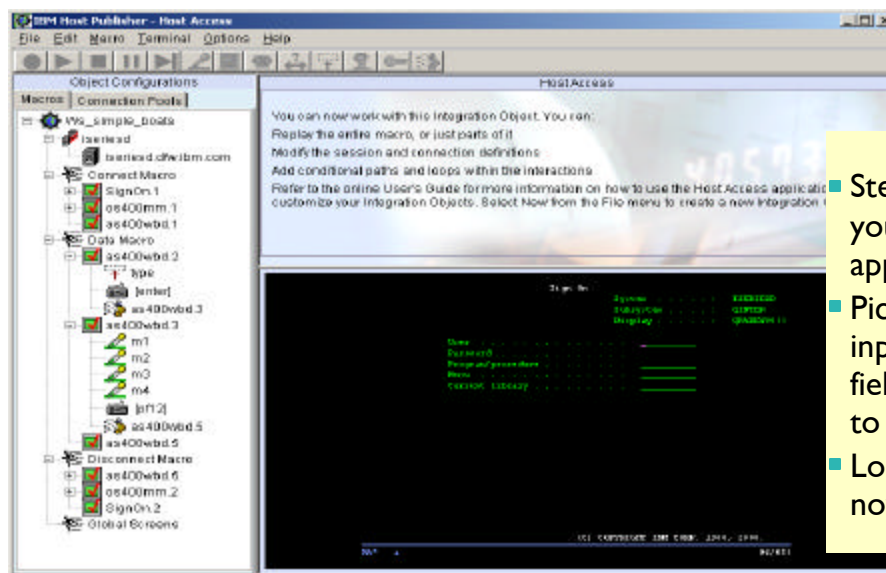
Development Environment Components

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



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...

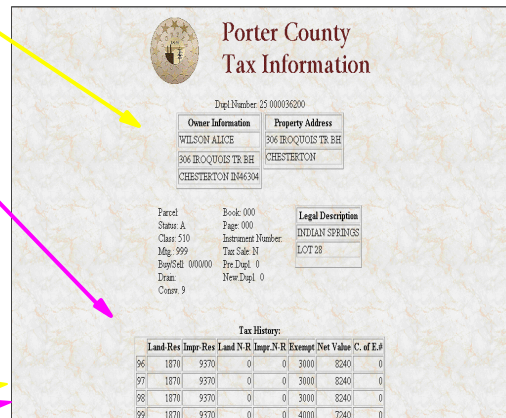
```

Date: 11/05/99 Time: 12:09:21
Dup No. 02 000251306 SHINDLER RAY C & SUSAN L/RM RIDGEWOOD CREEK
Parcel UNIT 1 LOT 16
Stat A Cte 510 Ht 3604 CHIMNEY HILL CT DR467 P61 VLRCD DITCH
By/SI 4/16/96 351 WILSON ALICE TNA6383
Drain 30 Conv 2 Bk/ 000 000 Inst # Sale N BANKRUPT
Property Address --> NO ADDRESS FOUND Pre.Dupl. 278560
    
```

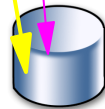
Land-Res	Impr-Res	Land-N-R	Impr-N-R	Exempt	Net Value	C. of E.#
5	3430	20230	0	3000	20860	0
T	0	0	3430	20230	0	23660
B	0	0	3430	20230	0	23660
9	0	0	3430	20230	0	23660

```

Mtg Y N N N Hmsta Y N N N Res N N N N Disvet N N N N Salar N N N N
Rehab N N N N WU1 N N N N Bld/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 5/03 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 1/18 0/00
98 A 909.92 909.92 5/0/99 .00 .00 0/00/00 5/24 0/00
Y B 909.92 .00 0/0/00 .00 .00 0/00/00 0/0/00
    
```



Remember that Porter County Application?



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

Summary - WebSphere Host Publisher

Pro's

- ✓ *Provided at no additional charge with iSeries Access Family*
- ✓ *Fairly easy to install and configure on server*
- ✓ *Programmable navigation through applications via scripts & macros*
- ✓ *Can merge / split applications*
- ✓ *Can consolidate many screens into one or break one into many*
- ✓ *3270 and 5250*
- ✓ *Non invasive - no source required*
- ✓ *Covered by iSeries Software Maintenance*

Con's

- ✓ *Future is uncertain relative to HATS*
- ✓ *Studio requires education to use*

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

Powered by Eclipse™ technology
Windows®



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

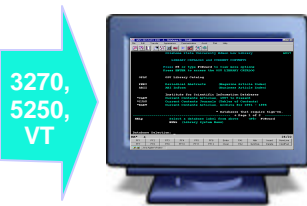
WebSphere Host Access Transformation Server (HATS)



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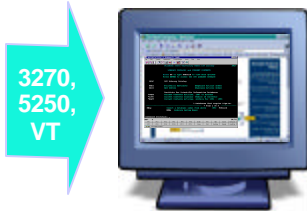
WebSphere Host Integration Solution



1) Personal Communications
Industry Leading Emulator
File Transfer / Printer Sessions



3) Screen Customizer
Customize GUI
Supports HOD, PCOMM



2) Host on Demand
Java Applet for 5250 or GUI
File Transfer / Printer Sessions



4) Host Publisher
HTML Solution with support for XML, Java
Captured Integration Objects

Host Integration
Solution includes
WebSphere App
Server and WSAD



5) HATS
Rules Based Transformation
Real Time Transformation

Host Access Transformation Server (HATS)

Converts green screens to GUIs on the fly, in real time

- ▶ A web-to-host 3270, 5250 HTML emulator...
- ▶ Preserves existing application flow...
- ▶ Translates system screens too...

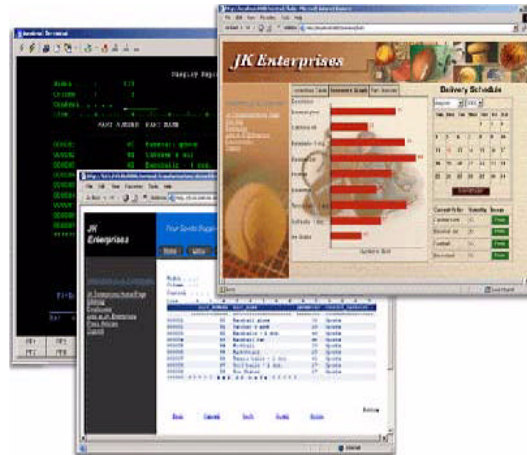
Easy Web-to-host first step

- ▶ Has a rules-based transformation engine...
- ▶ "Near" load-n-go implementation
- ▶ Low skills requirement

Zero footprint on the desktop

Industry-standards

- ▶ HTML, HTTP, HTTPs



Capabilities ...

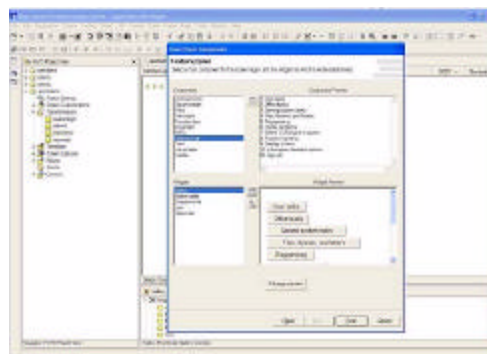
Designer is plug-in to WebSphere Studio Development Tools

Eliminates need to customize every screen

- ▶ Rules-based data stream translator

Additionally customizable

- ▶ Customize individual screens
- ▶ Play and record macros
- ▶ Add tabbed folders and graphs
- ▶ Store and retrieve global variables
- ▶ Can integrate with WebSphere Portal
- ▶ Skip and combine screens



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: Key Selling Points - HATS

Host screens are converted to GUIs on the fly, in real time

- On-the-fly screen conversion using the rules-based transformation engine. HATS does not "break down" when changes are made to the host application.

Easy Web-to-host first step

- Default rules allow your host application to be on the Web within hours of loading the software. There is no requirement for programming skills, and there is no need to customize every screen. If further customization is required this can be done at the customers own pace.

Eliminates need to customize every screen

- Due to the rules-based transformation engine not all screens require customization, and when changes are made to the host application HATS will continue to work without modification.

Low skills requirement

- HATS Studio, which plugs in to the Eclipse-based WebSphere Studio, is an easy to use wizard-based environment for converting host screens to a web-like appearance and functionality. No programming skills are required.

Preserves existing application flow

- HATS does not require any changes to the Host Application.

Rules-based, customizable

- HATS Studio provides easy-to-use wizards for customizing how host components are displayed. Use the WebSphere Studio or any industry-standard HTML editor to add: logos, graphics, backgrounds, Web links and other HTML elements.

Customizations are saved as reusable rule sets that can be applied to any host screens that share similar requirements.

- HATS can apply: an individual rule set to each host application; different rules sets to a single host application for different end user communities; the same rule set to multiple host applications.

"Near" load-n-go implementation

- Default rules allow your host application to be on the Web within hours of loading the software.

Zero footprint on the desktop

- Only software needed on the client is a Web browser, which provides support for 3270 and 5250 hosts.

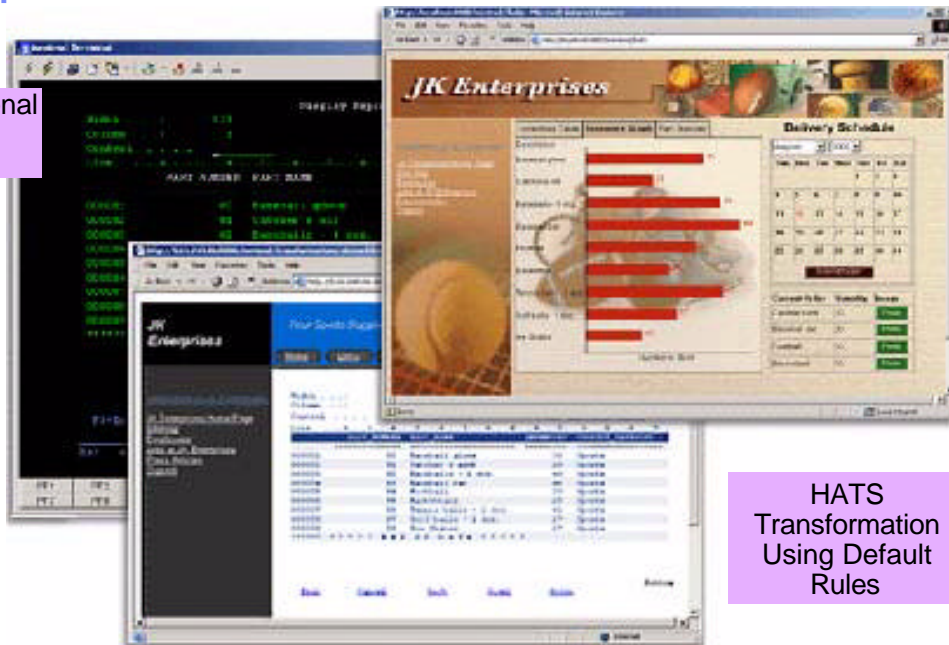
Virtually unlimited functionality

- Adding customization by using Macros, Global variables, Tabbed folders, Graphs, Java Widgets (e.g. calendar, calculator).
- Open J2EE architecture allows virtually unlimited flexibility and extensibility.

HATS requires all configuration to be 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 and installed on a WebSphere Application Server. Once it is started, it can begin to service clients.

Example

Traditional
Green
Screen



HATS
Transformation
Using Default
Rules

Packaging

Available through Passport

WebSphere Host Integration Solution

- IBM Personal Communications
- WebSphere Host On-Demand
- **WebSphere Host Publisher**
- **WebSphere Host Access Transformation Server (HATS)**
- IBM Communications Servers
- IBM Screen Customizer
- WebSphere Studio Professional Edition
- 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

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

- Customize individual screens
- Play and record macros
- Add tabbed folders and graphs
- Store and retrieve global variables
- Integrate with WebSphere Portal
- Skip and combine screens



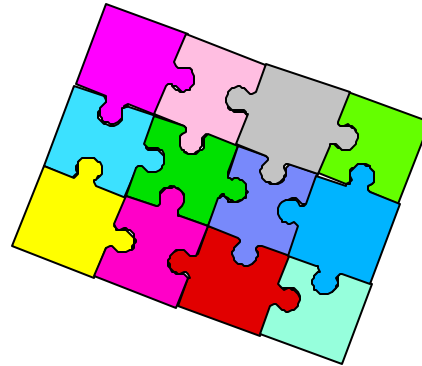
Comparison of HATS and HATS LE

Function	HATS	HATS LE
On-the-fly rules-based conversion of host screens to HTML GUIs	Yes	Yes
No need to access or modify source code	Yes	Yes
Host applications can be deployed to the Web within hours	Yes	Yes
Does not require modification when changes are made to host applications	Yes	Yes
Zero-footprint, zero-download - only code needed on the client is a Web browser	Yes	Yes
Supports iSeries subfiles	Yes	Yes
Provides native keyboard support	Yes	Yes
Secure HTTP (HTTPS) and Secure Socket Layer (SSL) security	Yes	Yes
Runs with WebSphere Application Server V4 & V5, including V5 Express	Yes	Yes
Leverages reliability and scalability of WebSphere Application Server	Yes	Yes
Works with Internet Explorer and Netscape Web browsers	Yes	Yes
Supports 5250 hosts	Yes	Yes
Supports 3270 hosts	Yes	No
Requires a WebSphere Studio installed on PC (either V4 or V5) to customize HTML	Yes	No
Uses Web-based Configurator and Management tool to customize HTML	No	Yes
Runs on iSeries Server Platform	Yes	Yes
Runs on AIX, Windows, Solaris, and zSeries Server Platforms	Yes	No

Comparison of HATS and HATS LE

Function	HATS	HATS LE
Any individual screen can be fully customized	Yes	No
Generate and run macros	Yes	No
Skip and combine screens	Yes	No
Store & retrieve data in global variables	Yes	No
Enter data on behalf of end user	Yes	No
Convert text entry fields to valid value lists	Yes	No
Create tabbed folders (with easy to use wizards)	Yes	No
Create bar & line graphs (with easy to use wizards)	Yes	No
Redirect users to other URLs	Yes	No
Globally replace text	Yes	No
Add business logic	Yes	No
Print locally with PDF printing function	Yes	No (1)
Use HATS portlet to integrate with WebSphere Portal	Yes	No

(1) Can combine use of iSeries Access for Web to work with spooled printer output and convert to PDF



Could combine the use many products...

iSeries Access for Web - sample 'customized' front page

Services

- [View available boats](#)
- [See boat details - \\$250](#)
- [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 refinished 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

You know if you have any questions or if we can help you in any way. Address your message to BOATHELP. [Send us a message](#)

Weather Conditions

Is it a great day for boating? Check out to our forecast.

Could include a link in here that started various refaced applications -- maybe on another system...

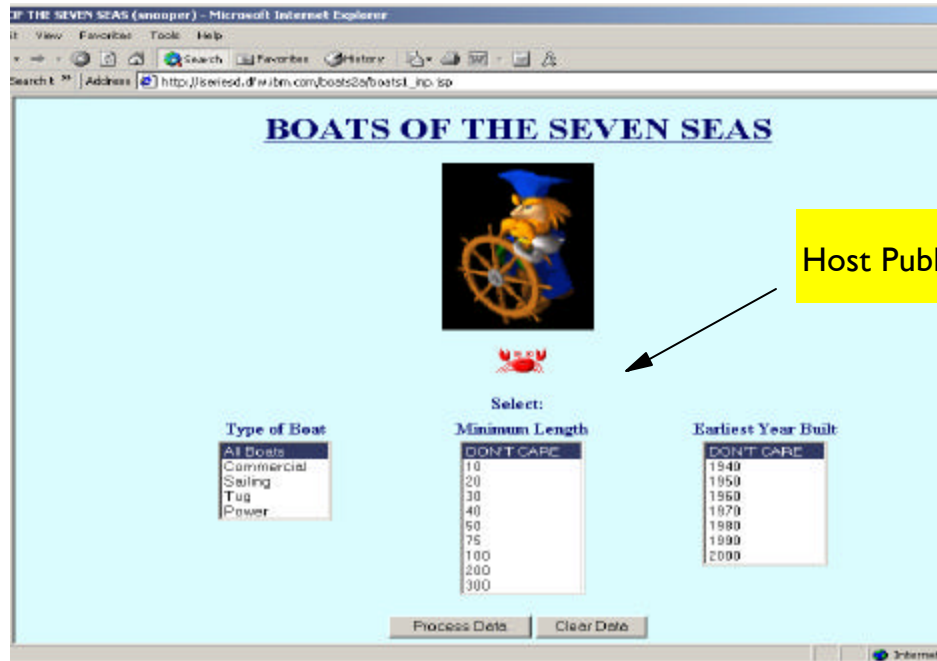
RPG Application - AS/400 WSG BOAT DEMO

The screenshot displays two versions of the AS/400 WSG BOAT DEMO application. On the left is the iSeries Access for Web 5250 interface, which has a blue header and a search form with fields for Type, Length (feet), and Year built. A yellow callout box with an arrow points to this interface with the text "Using iSeries Access for Web 5250 interface". On the right is the HATS LE interface, which has a tan background and a similar search form. A yellow callout box with an arrow points to this interface with the text "Using HATS LE interface". Both interfaces show search parameters and a "Home" link.

Boats application - WebFacing

The screenshot shows the Boats application running in Microsoft Internet Explorer. The browser window title is "Boats - Microsoft Internet Explorer" and the address bar shows "http://seriesd.dfw.ibm.com:2014/boats/WFLogon". The main content area displays the "Boats" application with a search form. A yellow callout box with an arrow points to the search form with the text "Could refactor application using IBM WebFacing Tool". In the bottom right corner, there is a smaller screenshot of the "JK Enterprises" application, which features a bar chart and a table. A yellow callout box with an arrow points to this screenshot with the text "Or modernize with HATS".

Boats applications - Host Publisher



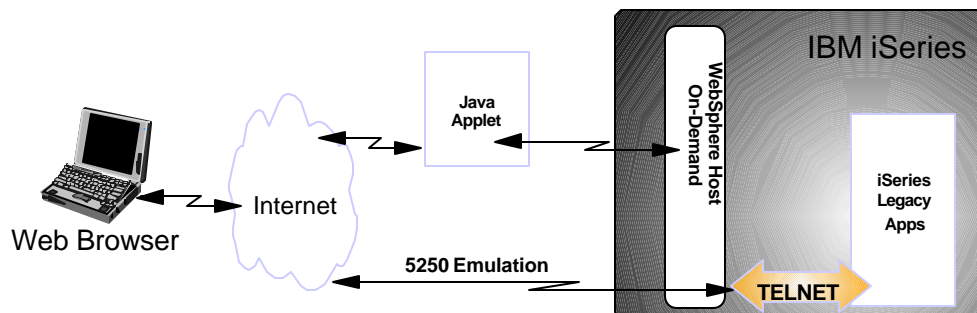
Main Features

	iSeries Access for Web	HATS LE	Host Publisher	IBM WebFacing Tool	HATS
<ul style="list-style-type: none"> • Web-enables existing Applications • Based on Java Technology • Presentation 	<ul style="list-style-type: none"> • Yes • Yes • HTML, JSPs, Servlets 	<ul style="list-style-type: none"> • Yes • Yes • HTML, JSPs, Servlets 	<ul style="list-style-type: none"> • Yes • Yes • HTML, JSPs, ServletsYes 	<ul style="list-style-type: none"> • Yes • Yes • HTML, JSPs, Servlets 	<ul style="list-style-type: none"> • Yes • Yes • HTML, JSPs, Servlets
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 	<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 6.0 • Netscape 4.72 (no keyboard support) 	<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 + 	<ul style="list-style-type: none"> • MS Internet Explorer 5.0 + • Netscape 6.0 • Netscape 4.72 (no keyboard support)
Interactive Feature Required	No - unless using 5250	Yes	Yes	No - with V5R2 and new hardware	Yes
Supported Host Interfaces	5250	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	Yes	No - limited support for selected commands in WDS V5	Yes

Main Features (continued)

	iSeries Access for Web	HATS LE	Host Publisher	IBM WebFacing Tool	HATS
Host Application modernization	No, other than runs in browser	No, other than runs in browser	Yes	Yes	Yes
SQL Database Access	Yes	No	Yes	No	No
Code Changes Required	No	No	No	No - although may choose to optimize for the Web	No
Programming effort to convert host interface to Web interface	None	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	Customize screen look and keyboards	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	No	Yes	No - may create Java extensions to the application
Merge/split of application screens	No	No	Yes - handled by macro recorder	Yes -with programming changes	Yes - handled by macro recorder

WebSphere Host on Demand



- **Basic 5250 Emulation**
 - Translation from 5250 data stream to HTML at execution time
 - May be done via Java applet
- **Uses Screen Customizer for GUI** (reaching end-of-life)
- **Available via:**
 - WebSphere Host Access Client Package
 - WebSphere Host Integration Solution
- **Interactive Job Workload**

Notes: Screen Customizer reaching end-of-life

Software Announcement 202-222
September 24, 2002

Excerpt:

This will be the last release of Screen Customizer. The IBM strategic solution for rejuvenation of legacy applications is WebSphere Host Access Transformation Server which delivers rules-based transformation of host screens with advanced customization. This product will be exclusively available within WebSphere Host Integration Solution V3.

See announcement letter via: <http://www2.ibmink.ibm.com/>

Other Application Refacing Solutions

- **Seagull Software LegaSuite**
 - www.seagullsw.com
- **Jacada Interface Server**
 - www.jacada.com
- **Look Software NewLook**
 - ww.looksoftware.com
- **System Objects JACi400**
 - www.systemobjects.com
- **Linoma Software Envoy**
 - www.linomasoftware.com
- **Farabi Technologies Host Front**
 - www.farabi.com



Some things you need to consider when making your decisions...

- ✓ How good must the GUI really be?
 - ✓ External vs Internal Audience
- ✓ Require source code?
- ✓ Dynamic capable?
- ✓ Interactive Workload Requirement
- ✓ Java Application Server Overhead
 - ✓ CPW required
 - ✓ Tomcat an option?
 - ✓ Require Base Edition?
- ✓ Intermediate node requirement
- ✓ Handling of keywords
- ✓ Integration with desktop applications
- ✓ Rules based conversion available?
- ✓ Double maintenance for NPTs?
- ✓ Retain use of NPTs?
- ✓ Flexibility of client interface
 - ✓ How much can you modify the GUI
 - ✓ Can you incorporate Java/XML
- ✓ Navigation & Function Issues of appl
- ✓ Strength of vendor offerings
 - ✓ breadth of options
 - ✓ experience / references
 - ✓ support / mentoring / education
 - ✓ Pilot / prototype

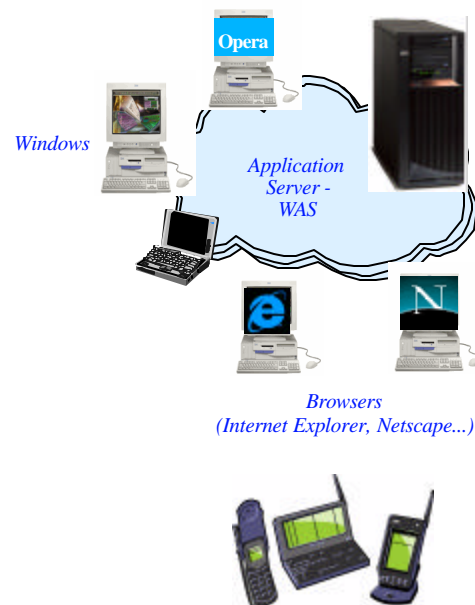
Summary

The products highlighted in this presentation can all be positioned as **complementary** to each other

Each product brings great strengths in a particular area...

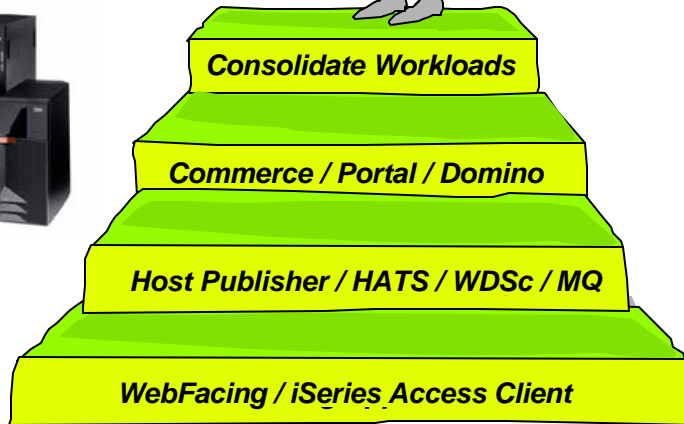
You need to determine what product is right for the task at hand...

- ▶ One may be right for this task...
- ▶ But the next project might well be better suited for one of the other products...
- ▶ Another project might call for a combination of these tools





**Do it on your
iSeries**



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