



# Get to the Web Fast with System i Access for Web

http://www.ibm.com/systems/i/software/access/web

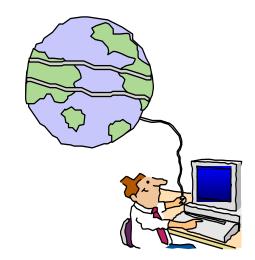
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System i Access for Web Development





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- What is System i Access for Web?
- Getting started
- Ways to roll out to end users
- Control access to functions



Note! A copy of this presentation can be found at: ftp://ftp.software.ibm.com/as400/products/clientaccess/win32/presentations/2008\_hasg



### What is System i Access for Web?

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

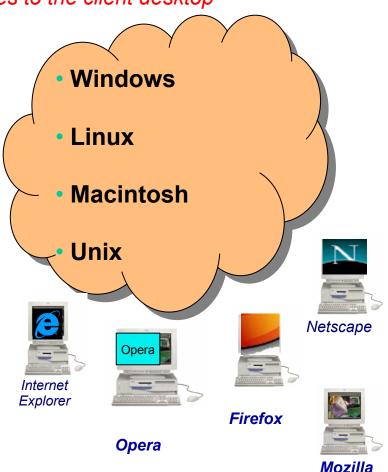
through a web browser

## 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:

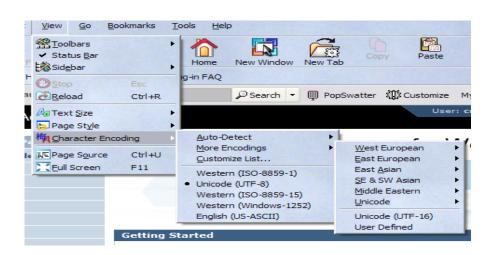
- Is server based
- Requires only a browser on the client, no configuration required at desktop, no applets installed on desktop
- Uses industry standard protocols -HTTP, HTTPS and HTML

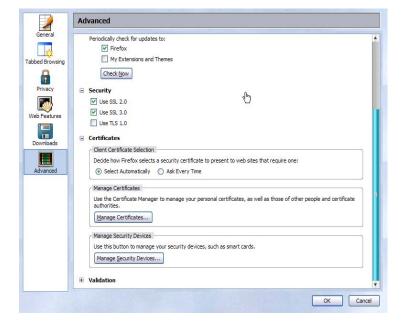




## Fully Integrated with your Browser

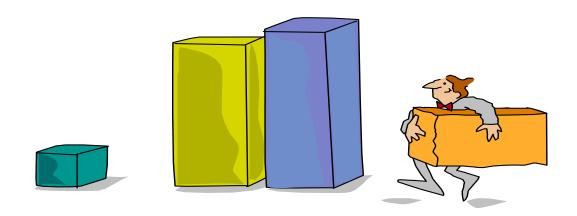
- Use any code page available in your browser
  - System i Access for Web translated into 38 NLVs (including DBCS
  - See screens in preferred language
- Use any keyboard setting available in Windows
- Font Size
- Set up your SSL through your browser







## **Packaging and Ordering**





## System i Access Family - Packaging

V6R1 5761-XW1 System i Access Family	V5R4 5722-XW1 iSeries Access Family
System i Access for Windows, 5761-XE1, V6R1	iSeries Access for Windows, 5722-XE1, V5R4
System i Access for Web, 5761-XH2, V6R1	iSeries Access for Web, 5722-XH2, V5R4
System i Access for Linux, 5761-XL1, Vx.x (V6R1)	iSeries Access for Linux, 5722-XL1, V1.10 (V5R4)
System i Access for Wireless, 5722-XP1, V5R3	iSeries Access for Wireless, 5722-XP1, V5R3
V5R4 i5/OS customers not wanting to upgrade to V6R1 i5/OS but want the new V6R1 System i Access Family clients can order no-charge Feature No. 2649 of Product No. 5722-XW1	

 NOTE: iSeries Access for Web is available on V5R1 and later. This chart summarizes the releases that can currently be ordered.



#### **Products - Focus**

Description	Product	Product Number	Need 57xx-XW1* to use?
Family Name	➤ System i Access Family	57xx-XW1	
Windows client	➤System i Access for Windows	57xx-XE1	Yes (for 5250 and Data Transfer)
Linux client	System i Access for Linux	57xx-XL1	Yes (for 5250)
Browser Access	➤System i Access for Web	57xx-XH2	Yes
Handheld / Wireless offering	➤System i Access for Wireless ➤iSeries Toolbox for Java ME	57xx-XP1	No
i5/OS systems management	➤ System i Navigator ➤ Operations Console	Packaged in 57xx-XE1	No

<sup>\* 57</sup>xx = 5761 or 5722

#### Flexible Purchase Options:

- Processor-Based = purchase price based on software tier, connect unlimited numbers of users
- ☼ User-Based = purchase only number of users who will be concurrently connected Notes:
- Can upgrade from User-Based to Processor-Based, but cannot go back to User-Based after purchasing Processor-Based

Software maintenance included in base i5/OS software subscription



## System i Access Family included with new hardware

- System i Access Family (5722-XW1 or 5761-XW1) unlimited user feature included with the following System i hardware
  - System i Model 515 Express configurations
    - See Announcement Letter 107-181 dated 4/1/07 for more details
  - System i Model 525 Express and CBU configurations
    - See Announcement Letter 107-182 dated 4/1/07 for more details
  - System i Model 570 with POWER6 technology
    - See Announcement Letter 107-448 dated 7/31/07 for more details
  - The new Power Systems Models 570 and 595 announced April 2008
- Any i5/OS user connecting to the above System i models is entitled to use any of the System i Access Family products at no additional charge. This includes:
  - System i Access for Windows
  - System i Access for Web
  - System i Access for Linux





#### Functions you can perform with System i Access for Web V6R1

#### **Print**

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

#### 5250

- Active Sessions
- Start 5250 Session
- Configured Sessions
- Bypass Sign-on

#### **Files**

- Browse Files
- File Shares
- Browse File Share

Items marked with "\*\*" are new in the V6R1 version

#### Messages

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

#### **Database**

- Tables
- My Request
- Run SQL
  - Open Office Formats
  - \*\* Wizards supports joins across multiple tables
  - \*\* Chart SQL results
- Copy Data to Table
- Import Requests
  - System i Access for Windows
  - Query Manager
  - Query/400
- Extract Server Data

#### Commands

- Run commands
- My commands
- Search

#### My Personal Folder

#### Jobs

- User Jobs
- Server Jobs

#### Customize

- Preferences
- Policies
- Settings
- Transfer configuration data

#### **Download**

#### Other

- Bookmarks
- Change Password
- Connection Pool
- Status
- Trace

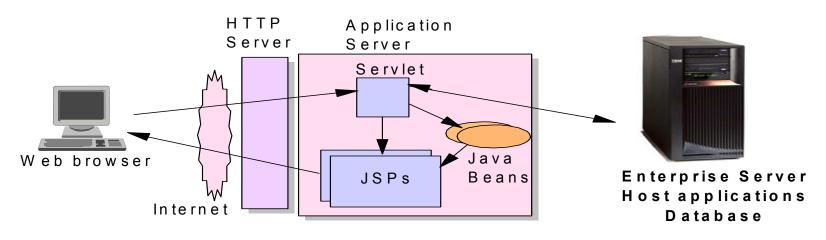
#### Single sign-on

- EIM (WAS authentication)
- \*\* Windows domain login (WAS authentication)
- \*\* Scheduling of tasks



## **Getting Started**

# Before you start with Access for Web you must get your web application server running



Tier 1 Tier 2 Tier 3



#### **Supported Web Application Servers**

- The System i Access for Web servlet code can be used with any of the following web application servers:
  - Integrated web application server
  - WebSphere® Application Server V6.1 and V6.0 – Express for i5/OS
  - WebSphere Application Server V6.1 and 6.0 Base and Network Deployment
  - WebSphere Application Server V5.1 -Express for iSeries
  - WebSphere Application Server V5.0 -Express
  - WebSphere Application Server V5.1 and 5.0 Base and Network Deployment Editions
  - ASF Tomcat (V5R4 and earlier releases)

- The System i Access for Web portlet code can be used with any of the following portal servers.
  - IBM Workplace Services Express V2.6
  - WebSphere Portal for Multiplatforms V6.0
  - WebSphere Portal for Multiplatforms V5.1.0.1
  - WebSphere Portal Express for Multiplatforms V5.0.2
  - WebSphere Portal Express Plus for Multiplatforms V5.0

PTFs required for latest web app server and portal support: <a href="http://www.ibm.com/systems/i/software/access/web/servicepacks.html">http://www.ibm.com/systems/i/software/access/web/servicepacks.html</a>



#### Integrated Web application server

What is it? Does System i Access for Web support it?

- What is the i5/OS integrated Web application server?
  - A web application engine much like ASF Tomcat
  - Uses minimal system resources, similar to ASF Tomcat
  - Minimal effort by an Administrator to maintain
  - V5R4 is the last release i5/OS will contain ASF Tomcat
- How is it packaged?
  - 5761-DG1 and 5722-DG1 IBM HTTP Server for i5/OS
  - Integrated Web application server 7.1 is available in the DG1 group PTF
    - V5R4 SF99114 level 13 or later
    - V6R1 SF99115 level 1 or later
- System i Access for Web support
  - V5R4 and V6R1 System i Access for Web support the i5/OS integrated Web application server
  - V5R4 iSeries Access for Web can be installed and is supported on V5R4 and V5R3 i5/OS
  - V6R1 System i Access for Web can be installed and is supported on V6R1 and V5R4 i5/OS



## Integrated Web application server – V6R1 or V5R4 i5/OS

## Use V6R1 iSeries Access for Web within the V6R1 or V5R4 i5/OS integrated Web application server 7.1

- 1. Stop the Web Administration for i5/OS
  - ENDTCPSVR SERVER(\*HTTP) HTTPSVR(ADMIN)
- 2. Load/apply latest 5722-DG1 group PTF (review cover letters for any additional information)
  - V5R4 SF99114 group 13 or later
  - V6R1 SF99115 group 1 or later
- 3. Load/apply latest V6R1 iSeries Access for Web PTF
  - SI29664 or later
- 4. Follow the instructions in the doc on this page: http://www.ibm.com/systems/i/software/access/web/servicepacks.html

Link: "Configuring an Integrated Web Application Server Instance"

- 5. Open a browser to iSeries Access for Web using HTTP port http://<your\_system>:<your\_port>/webaccess/iWAMain
- 6. Done!



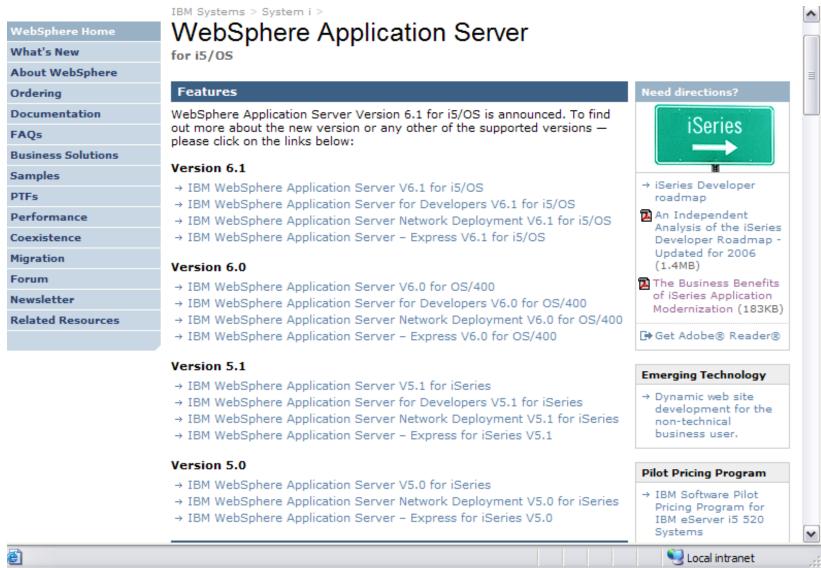
## Integrated Web application server – V5R3 i5/OS

## To use the integrated web application server on V5R3 i5/OS using V5R4 iSeries Access for Web:

- 1. Stop the Web Administration for i5/OS
  - ENDTCPSVR SERVER(\*HTTP) HTTPSVR(ADMIN)
- 2. Load/apply latest V5R3 5722-DG1 group PTF (review cover letters for any additional information)
  - V5R3 SF99099 level 15 or later
- 3. Load/apply latest <u>V5R4</u> iSeries Access for Web PTF
  - SI25551 or later
- 4. Configure iSeries Access for Web
  - QSH
  - cd /QIBM/ProdData/Access/Web2/install
  - cfgaccweb2 –appsvrtype \*INTAPPSVR
- 5. Start the Web Administration for i5/OS
  - STRTCPSVR SERVER(\*HTTP) HTTPSVR(\*ADMIN)
- 6. Start preconfigured HTTP web server
  - STRTCPSVR SERVER(\*HTTP) HTTPSVR(IWADFT)
- 7. Open a browser to iSeries Access for Web using preconfigured HTTP:port
  - http://<system\_name>:2020/webaccess/iWAMain
- 8. Done!



#### http://www.ibm.com/systems/i/software/websphere/

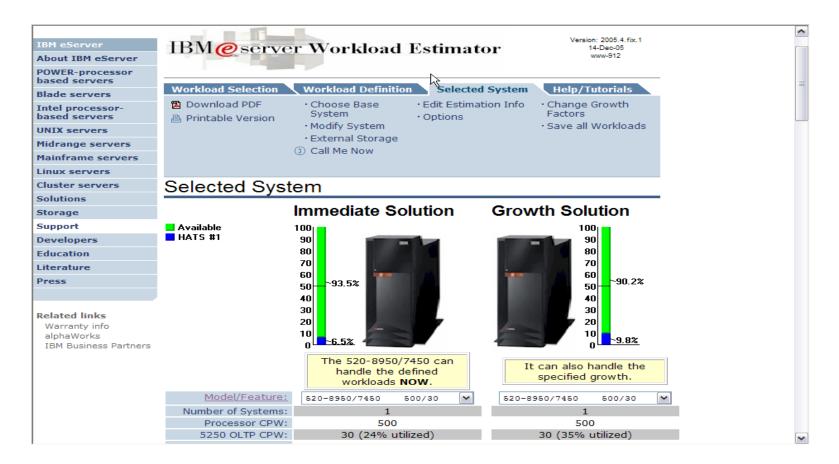




#### Performance Considerations...

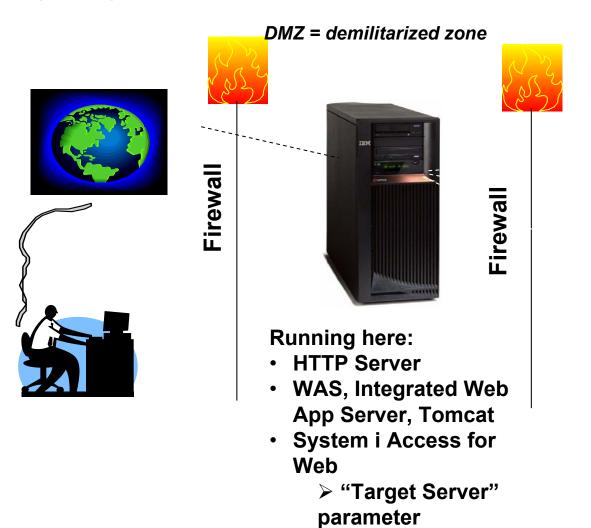
#### **Use the IBM Systems Workload Estimator at**

http://www-912.ibm.com/wle/EstimatorServlet





#### Setting up your web application server





Only need to set up one web application server



## **Port Requirements Comparison**

## System i Access for Windows (5722-XE1)\*

- 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 389 (636) for LDAP
- Port 5555 (5566) for Mgmt Central
- Port 53 if using DNS Server

# System i Access for Web (5722-XH2)

- Port 80 (or any other port) for HTTP Server
- Port 443 (or any other port) for HTTPS Server

\*See Information APAR II12227 for detailed information



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## Get System i Access for Web running

- Get a copy of the System i Access for Web Install & Users Guide
  - http://www.ibm.com/systems/i/software/access/web/doc.html
- Install System i Access for Web from your i5/OS stacked media.
  - RSTLICPGM Install Access for Web, 5722-XH2, into QIBM directory
- Configure and start System i Access for Web.
  - CFGACCWEB2 Configure the System i Access for Web application server
  - STRACCWEB2 Start the System i Access for Web application server.
- Set some policies to enable or limit access to various functions of Access for Web



## System i Access for Web Documentation on the Web...

V6R1

V6R1 System i Access for Web is supported on V6R1 and V5R4 i5/OS.



Connecting to System i: System i Access for Web (Information Center)	HTML PDF
System i Access for Web Single Sign-on Using WebSphere SPNEGO Support	PDF
Automating Tasks - HTTPS/SSL	PDF
Configuring an Integrated Web Application Server Instance	PDF

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V5R4

V5R4 iSeries Access for Web is supported on V5R4 and V5R3 i5/OS.



Connecting to iSeries: iSeries Access for Web (Information Center)	HTML PDF
URL Interfaces to V5R4 iSeries Access for Web	PDF

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V5R3

V5R3 iSeries Access for Web is supported on V5R3 i5/OS and V5R2

http://www.ibm.com/systems/i/software/access/web/doc.html



## **i5/OS Software Requirements**

Product Number	Product Name	Option	\$
57xx-SS1	V5R3 iSeries Access for Web: V5R2 OS/400 or V5R3 i5/OS V5R4 iSeries Access for Web: V5R3 and V5R4 i5/OS V6R1 System I Access for Web: V5R4 or V6R1 i5/OS	Base	w/HW
57xx-SS1	i5/OS- Extended Base Directory Support	3	N/C
57xx-SS1	i5/OS - AFP Compatibility Fonts	8	N/C
57xx-SS1	i5/OS - Host Servers	12	N/C
57xx-SS1	i5/OS QShell Interpreter	30	N/C
57xx-SS1	<ul> <li>If you plan to use Secure Sockets Layer (SSL): i5/OS Digital Certificate Manager</li> <li>Cryptographic Access Provider (128-bit)</li> </ul>	34	N/C N/C
57xx-DG1	IBM HTTP Server for i5/OS	Base	N/C
57xx-JV1	Developer Kit for Java  Developer Kit for Java Version 1.3  Developer Kit for Java Version 1.4  (or later: Check WebSphere doc for required version)	Base 5 6	N/C N/C N/C
57xx-JC1	Toolbox for Java	Base	N/C
57xx-TC1	TCP/IP Connectivity Utilities for i5/OS	Base	N/C





## i5/OS Software Requirements (continued)

Product Number	Product Name	Option	\$
57xx-XW1	System i Access Family	Base	\$
57xx-XH2	System i Access for Web  Ships with 57xx-XW1 System i Access Family V5R3 iSeries Access for Web runs on OS/400 V5R2 and i5/OS V5R3 V5R4 iSeries Access for Web runs on i5/OS V5R3 and V5R4 V6R1 System i Access for Web runs on i5/OS V5R4 and V6R1	Base	part of XW1
57xx-IP1	IBM Info Print Server  (Optional enables best PDF output: - is not required to view PDF output - is required for V5R3 and V5R4 "PDF Printer" support)	Base	\$



#### Software Requirements (continued)

Product Number	Product Name	Option	\$
5733-W61 5733-W60 57xx-E51 5733-W51 57xx-IWE 5733-WS5	One, or more, of the following web servers  • WebSphere Application Server V6.1 for i5/OS (all three editions)  • WebSphere Application Server V6.0 for OS/400 (all three editions)  • WebSphere Application Server V5.1 - Express for iSeries  • WebSphere Application Server V5.1 for iSeries (Base and ND)  • WebSphere Application Server V5.0 - Express for iSeries  • WebSphere Application Server V5.0 for iSeries (Base and ND)	See documentation	
57xx-DG1 57xx-DG1	<ul> <li>Apache Software Foundation Tomcat</li> <li>Integrated web application server</li> <li>WebSphere Portal for iSeries (Express and Express Plus) V5.0.2.2</li> </ul>		
* *	<ul> <li>WebSphere Portal for iSeries (Express and Express Plus) V5.0.2.2</li> <li>WebSphere Portal Enable for Multiplatforms V5.1.0.1</li> <li>WebSphere Portal V6.0</li> <li>IBM Workplace Services Express V2.5, V2.6</li> </ul>		

Refer to the documentation for the individual web serving environments additional requirements that may not be listed above.

-	WebSphere	http://www.ibm.com/servers/eserver/iseries/software/websphere/wsappserver/
_	ASF Tomcat	http://www.ibm.com/servers/eserver/iseries/software/http/
_	Portal V5.0.2.2	http://publib.boulder.ibm.com/pvc/wp/502/smbi/en/InfoCenter/index.html
_	Portal V5.1.0.1	http://publib.boulder.ibm.com/infocenter/wp51help/index.jsp
_	Portal V6.0	http://publib.boulder.ibm.com/infocenter/wpdoc/v6r0/index.jsp
_	Workplace V2.5	http://publib.boulder.ibm.com/infocenter/wseic/v2r5/index.jsp
_	Workplace V2.6	http://publib.boulder.ibm.com/infocenter/wseic/v2r6/index.jsp

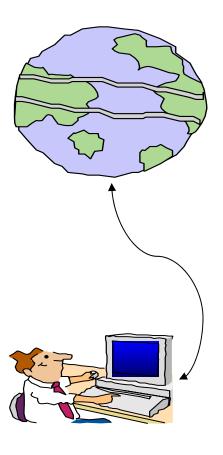


## 4 CL Commands in System i Access for Web

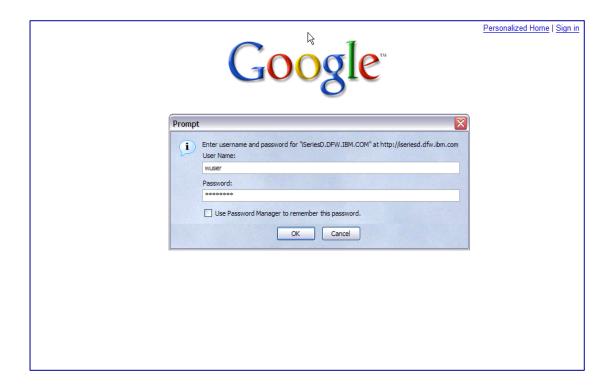
- Configure Command example when using WebSphere Application Server V5.1 - Express for iSeries
  - CFGACCWEB2 -appsvrtype \*WAS51EXP -wasinst iwa51exp -appsvr iwa51exp
- Start Command example when using WebSphere Application Server V5.1 - Express for iSeries
  - STRACCWEB2 APPSVRTYPE(\*WAS51EXP) WASINST(MYINST) APPSVR(\*DEFAULT)
- End Command example when using WebSphere Application Server V5.1 for iSeries
  - ENDACCWEB2 APPSVRTYPE(\*WAS51) WASINST(DEPTXYZ) APPSVR(\*DEFAULT)
  - Sometimes you may need to end Access for Web so you can make changes, then start it again.
- Remove Command
  - The Remove System i Access for Web (RMVACCWEB2) command is used to remove the System i Access for Web configuration from a web application server



#### **Users can now Connect!**



- Open browser
- Key in System i url
- Prompted for i5/OS user id and password





## Different Ways to Roll Out System i Access for Web

#### Use 'out of the box'

 Set some policies to limit what functions are accessible to your users, and give them the URL address to System i Access for Web

#### Use 'out of the box', but set up predefined functions

 You can set up preconfigured 5250 sessions that users (or groups of users) can run, can create predefined database requests for users to run, set up commands users can run, etc.

#### Create your own 'window' to your system through Access for Web

 Add company banners to screens, set up 'click and link' tasks that users can perform, set up macros to simplify user access.

#### Use Access for Web with the IBM WebSphere Portal solution

 A single unified workspace in which your employees, trading partners, and customers can easily find and use the applications and information that they need



### Different Ways to Roll Out System i Access for Web

- Use 'out of the box'
- Use 'out of the box', but set up predefined functions



 Create your own 'window' to your system through System i Access for Web



Use the WebSphere Portal solution

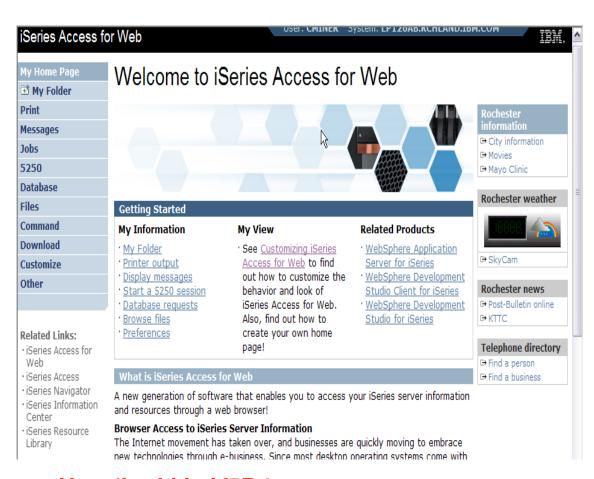


#### **Home Page entry point**

Home Page = http://<myiseries>:<port>/webaccess/iWAHome

 System i Access for Web 'Home Page' out-of-the-box view

 This page is totally customizable



New 'look' in V5R4...



#### Your Window to your System i

http://<myiseries>/webaccess/iWAHome

#### Customized 'window' to i5/OS

## Window is associated with i5/OS user profiles

- An administrator can create multiple different 'windows' based on user profile / group profile for different types of users.
- Can tightly control what functions a user can perform on your iSeries
- Tie in with other web applications (such as WebFacing and HATS) from here as well
- Link to other systems, not just
   System i



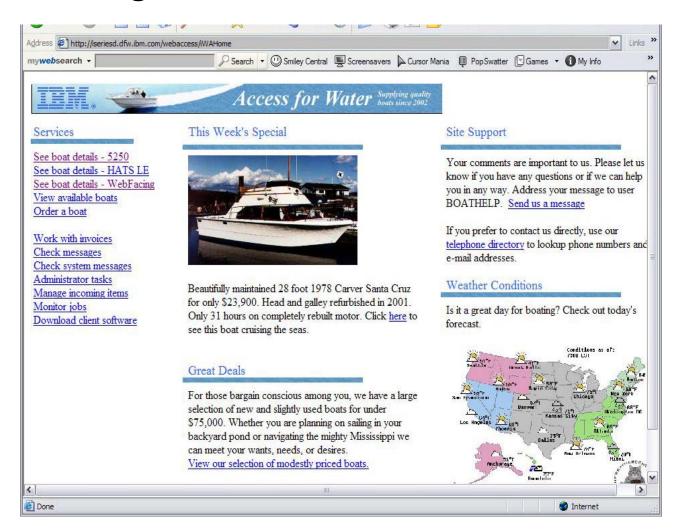
- One view and set of functions for the Accounting department
- Another view and set of functions for the Warehouse staff



#### **Customized Home Page**

# Customized view of the Home Page

- Could be used as 'entry' point to iSeries
- Let's drill down and look at some of this...







## Using 5250 emulator in System i Access for Web

# The company banner, 'Access for Water' is carried forward on all screens

 Went into 'Customize → General' and pointed at file with the company .gif.

#### 5250 emulator in Access for Web

- Application looks better and did no work
- Can use 5250 Bypass Signon (new in V5R4) to bypass i5/OS sign-on screen
- Can use Access for Web Macro support to start the RPG application (BOATS)





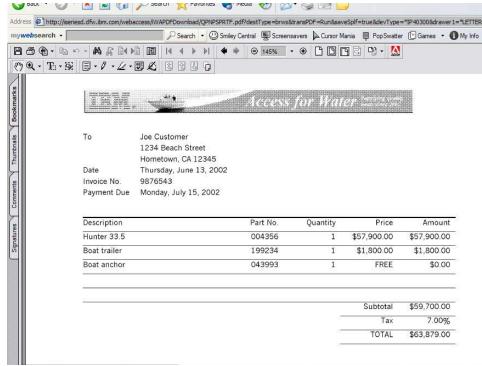
#### Task Oriented – not function oriented...

#### Selected 'work with invoices'

- This takes user to 'Printer Output' – user's Spoolfile printer output
- SCS or AFP printer output is converted to PDF 'on the fly' by Access for Web to PDF
- Since it is now in .PDF format, user can print it to any network printer



Access for Water - Microsoft Internet Explorer





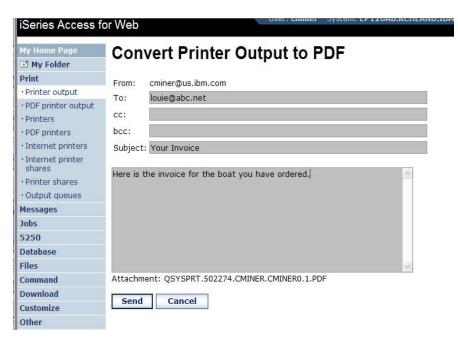
## **E-mail PDF output**

## E-mail is integrated with System i Access for Web

- Your mail server can be anywhere in your network
- Users receiving your e-mail need only an e-mail address

User selects an option in the Printer Output screen to 'e-mail PDF output'

- The PDF document is then included in the e-mail
- Sender's e-mail address filled in; user only needs to address it.

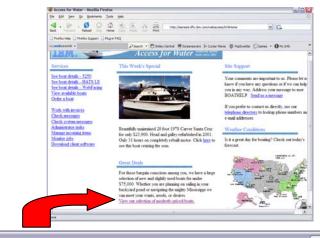


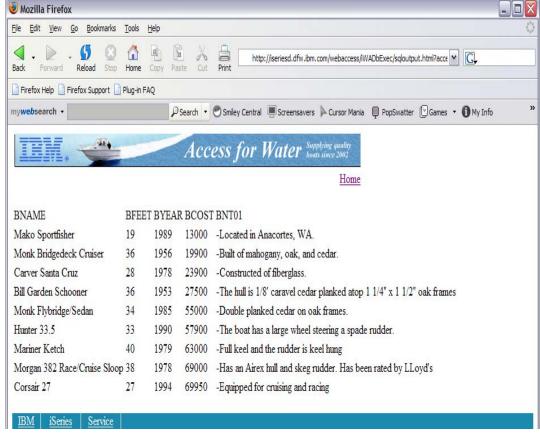


### Run an i5/OS Database Query

# Clicked on 'View our selection of moderately priced boats'

- Administrator had previously built an SQL Query using the System i Access for Web 'Database' function
- Could also have been set up to show in an .XLS or .PDF format
  - a variety of other output types as well







### Try out System i Access for Web on a demo server!

Start your browser and connect to the following web site: http://iseriesd.demos.ibm.com/webaccess/iWAHome (case sensitive)

User ID = WACUST  Password = demo2pwd	This shows the basic look of System i Access for Web as we ship it. You can try various functions including working with printer output, creating database requests, etc. Click on the 5250 tab, sign onto the iSeries, then start an RPG application called BOATS and run it.
User ID = BOATADMIN  Password = demo2pwd	This is an example of how a customer might design a web page for their use. You will see that an end user could start the same BOATS application by clicking on the 5250 session, or they could have used HATS to run the application. You will also see other links that would let a user work with spooled file information, work with IFS, run database requests, etc

Send email to: LLHIRSCH@us.ibm.com to reset the user profiles if either gets disabled.



#### More Documentation...

**Article describing how 'Access for Water'** web page was built

Go to the System i Access Family web page at:

www.ibm.com/systems/i/software/access/web/articles.html

- Find article written Jan/Feb 2003 entitled 'Build a Quick and Easy Web Site with iSeries Access for Web' (PDF version)
- Updated Oct 2006 in System i News 'Tailor iSeries Access for Web'

Weber on CA/400

#### Weber on CA/400

 Who sell benefit? (Sectes managers and dealtop administrators who want to Web-enable their (8 ed ea applications.

 What you'll learn: White's step-by-step action details how shope can use its size.
 Access for the Web to provide browned and access to its clear applications and data. Because (Section Access for Web to Implemented as a set of Java seculote that cun on the 18ected according to browner to despite don the client.

· Bottom II no: Eyout (Sector servet to part of your company's Intranet, you can use 18ectes Access for Web to provide wares to your resources for others within your company. If your 18ected decret to part of the Indepent, you can use 18ected
Acres for Web to provide acres to your resources for your customers and suppilete. In this case, you also need to provide your quetomers and suppliess with a uses profile to notion your 18ed to server Regnedless, through 18ed to Access for Wab, I Section shope to extend their host applications and data to a becoverebased environment and give both usess and business partness access over the Web.

#### uild a quick and easy Web site with iSeries Access for Web by Jan et Weber

You can build a quick and every Web eith for your company with the authomization support of identity Access for Web. No Java cuscommental support of 1046144 Access for MAIL 140 pms programming is required. You simply create HDML files and set configuration options. In this settlet, I demonstrate this appointing to creating a Web site to sell bants. This information is based on the functionality available with the VSIQ celeare of iSeries Access for Web. First introduced by IEM in September 2001, it provides a brower interface to i8-raise cosmucose, such as DR2 UDB, pointed output, and O8/400 CL commande

#### Home page and template files

iSecine Accese for Web ships a default home page. This page is displayed when you accese the home page UKL http://cepterni/webaccese/WAHome. The default home page is etated in the idecise integrated 61+ egatem in the Ediloving Ioostian: /QUBM/Prod Data/Access/Wht2/html/homepage.html

idenies Access for Web also ships a default template file. The template file contains the HTML source displayed at the top and bottom of each idenies Access for Web containing. The location of the default template file is /QIDM/Food Data/ Access/Web2/html/web-access/tem/. The 33 values in the template file are replacement tags. We will diessee these lates in the action.

First of all, we need to assate a austranized home page and a austomized template file. We do not want to modify at update the files under / QIBM/ Pool Data eince this disectory took is intended only for peoduct files. Instead, we assate a new diseatory named /boots/hamepage and place out files in it. Our austomized home page contains link storries and codes basts. Our austomized template file contains the company's logo. We discussed stails of the file contains lates in the actide.



Janet Weber tean adoleony eofbuses enginees in the IBM. Rochester, Minn weeks labor

catody. She have hard a wastety of colession the DC Suppliet, Client Access and 18ed at Access peoduda. Hac foqualiza baan on programming interfaces. Jan & le automily a member of the (Section Alexandrical Web discolop ment beam.



## **Different Ways to Rollout Access for Web**

Use 'out of the box'



Use 'out of the box', but set up predefined functions



- Create your own 'window' to your system through Access for Web
- Use the WebSphere Portal solution



# System i Access for Web has many entry points

#### 'URL Interfaces to System i Access for Web' manual available on the web

http://<myiseries>/webaccess/iWAMain

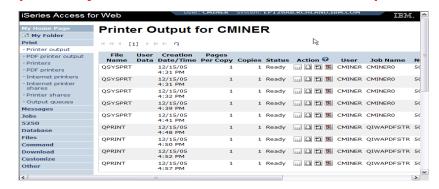
- Can enter at many different pages
- Can use navigation bar to move from function to function

http://<myiseries>/webaccess/iWA5250





#### http://<myiseries>/webaccess/iWASpool



1

## Reduce functions you give to users

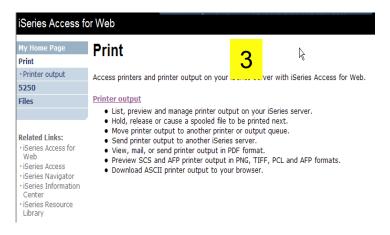


iSeries Access for Web IIIM Print Print Printer output Access printers and printer output on your iSeries server with iSeries Access for Web. · PDF printer output Printers · List, preview and manage printer output on your iSeries server. PDF printers . Hold, release or cause a spooled file to be printed next. Internet printers · Move printer output to another printer or output queue. Internet printer · Send printer output to another iSeries server. shares · View, mail, or send printer output in PDF format. Printer shares · Preview SCS and AFP printer output in PNG, TIFF, PCL and AFP formats. · Download ASCII printer output to your browser. Output aueues 5250 PDF printer output Files • List, view and manage PDF printer output on your iSeries server. . Mail and save PDF printer output. Related Links: · iSeries Access for · List and manage printers on your iSeries server. Web · View printer and status information. · iSeries Access Vary on and vary off the printer device. iSeries Navigator . List, preview and manage printer output for a printer from the printer list. iSeries Information · View and answer messages waiting on the writer job. Center . Manage the writer job associated with the printer using hold, release, start and stop iSeries Resource Library PDF printers

# Reduce tabs that get displayed

Reduce options under tabs

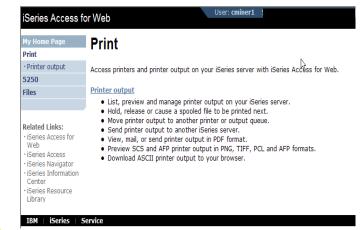




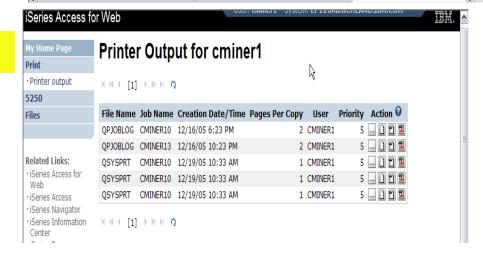


# **Printer Output - Spoolfile**

- 1. Print Tab
  - User only has one option available, i.e. 'Printer output'
- 2. Default look of 'Printer Output'
- 3. Customized look of 'Printer Output' for signed on user
  - Removed many of the columns of printer output
  - Reordered list
  - Removed several end user actions



Printer Output for cminer My Folder Print · Printer output · PDF printer output 12/15/05 4:31 PM QSYSPRT QSYSPRT ... D E CMINER CMINERO 502274 Drinter chares ... [] [ CMINER CMINERO 502274 12/15/05 ... | CMINER CMINERO 5250 QPRINT 12/15/05 ... D T CMINER OIWAPDESTR 502281 Database 4:48 PM Files OPRINT 12/15/05 Command OPRINT ... D T CMINER OIWAPDESTR 502287 12/15/05 OPRINT 12/15/05 4·57 PM



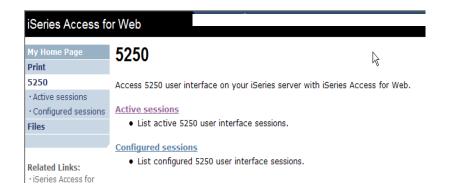


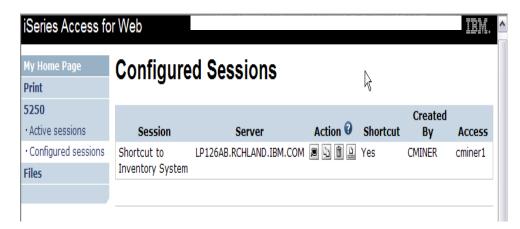
# Run Pre-configured 5250 Sessions

You want to limit users to only starting 5250 sessions that you have preconfigured

- You have removed user's ability to configure a session
- User selects 'Configured Sessions'
  - Only one listed, only action user can perform is to 'start' it
- User clicks on Start









## User can run 5250 application

# User is placed in this application

- The session could be configured to include a macro to put the user directly into a specific application on the System i
  - Or on a menu screen
- Use CHGUSRPRF, LMTCPB=Yes to remove command line from user's screen





# Change look of 5250 session

- 1. Default 'web' look
- 2. Changed colors, added keypad at side, changed buttons at bottom to words





2

- 3. Removed navigation bar, put keypad on top
- 4. Selected 'traditional' view, removed navigation bar







#### Work with Files in the IFS

- Navigate and browse the directories located on your iSeries server integrated file system
  - Don't need to map drives
  - Don't need to know directory structures



- View, upload, and download files
- Copy and mail files
- Rename and delete files and directories
- Zip and unzip files and directories
- Edit authorities and change ownership of objects in the integrated file system



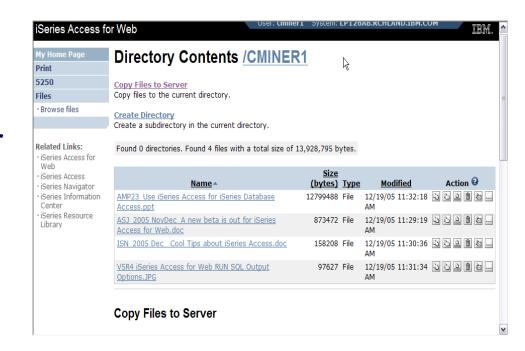
#### **Browse Files - 'Filtered View'**

When I click on 'Browse Files', I see only a directory called 'cminer1' and its content

 Because the administrator set a 'Default Directory' policy for me

#### **Actions I can perform:**

- Subdirectories: Create new ones, Rename, Work with
- Files: Copy, Rename,
   Delete, Mail, Work with (ie,
   Zip, Unzip, etc)





# Different Ways to Rollout System i Access for Web

- Use 'out of the box'
- Use 'out of the box', but set up predefined functions
- Create your own 'window' to your system through Access for Web





**Use the WebSphere Portal** solution



# Portal Solutions – the next wave in technology

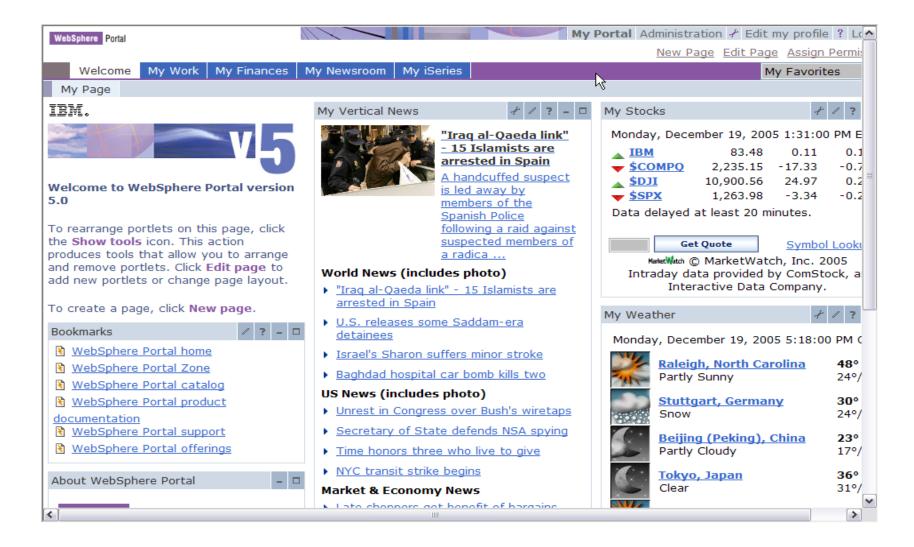
For most organizations, the decision to invest in an enterprise portal is not a question of "if," but "when"?

(Craig Roth, VP META Group, 6/3/03)



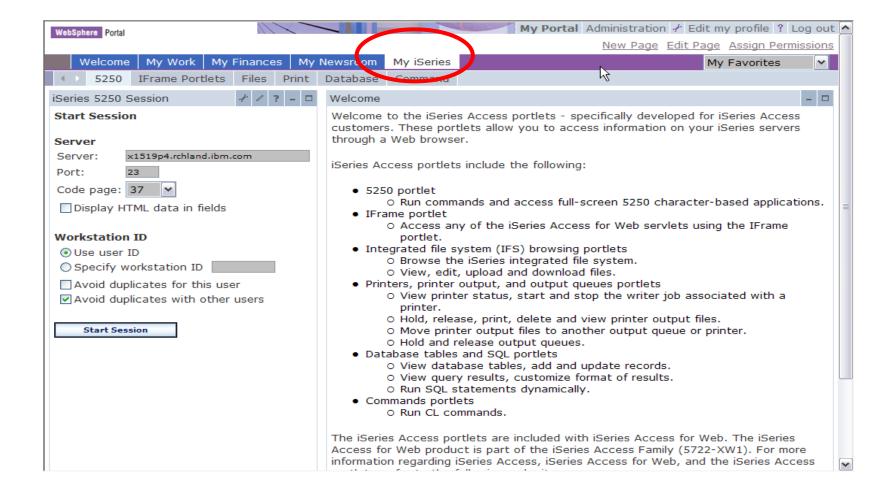


#### Portal built on i5/OS





# System i Access for Web Portlets on System i Portal





# Portlet Support added to System i Access for Web

V6R1	V5R4	V5R3 PTF SI11914 (May 2004)	V5R3 (Jan 2004)
<ul> <li>New portal application:         "Standard portal application"         <ul> <li>Written to the Java Specification Requests (JSR) 168 Portlet Specification</li> <li>Strategic System i Access for Web portal offering</li> </ul> </li> <li>Original portlets, "IBM portal application," are still available</li> </ul>	<ul> <li>Single Sign-on (SSO)         <ul> <li>Via WAS Security model</li> <li>5250 Bypass signon option</li> </ul> </li> <li>Database         <ul> <li>OpenOffice spreadsheet format (.ods)</li> <li>iSeries SQL Requests</li> <li>Viewer to look at iSeries SQL results</li> </ul> </li> <li>Files         <ul> <li>Zip function to zip files in IFS</li> </ul> </li> <li>iSeries Credentials         <ul> <li>Users can change i5/OS password via System i Access for Web, and it will additionally update currently defined credentials with the new password value.</li> </ul> </li> </ul>	<ul> <li>File</li> <li>Print</li> <li>Database</li> <li>Command</li> <li>Credentials</li> <li>Related Links</li> </ul>	• 5250 • iFrame • Welcome



# Different Ways to Rollout Access for Web

- Use 'out of the box'
- Use 'out of the box', but set up predefined functions



 Create your own 'window' to your system through Access for Web



Use the WebSphere Portal solution



### Control user access to functions



- 1. How do I keep my users from using all these functions?
- 2. How do I set up the environment for my users?
- 3. Should I let my users set have some individual screen settings for some functions?

You need \*SECADM authority to customize profiles



# System i Access for Web uses i5/OS User Profiles

When an System i Access for Web user attempts to access any function on the iSeries, the following sequence of checks are made to authenticate user access:

- User profile
- Group profile(s)
- \*PUBLIC profile

\*PUBLIC profile is the set of default policy settings shipped with Access for Web

The defaults allow most functions to be available to all users

The settings in these policies indicate what functions within System i Access for Web, a user can attempt to use.

- For Example: Let's say you give users full access to the 'Database' tab.
- You have Object Level authority set up on your data
- When a user attempts to use one of the System i Access for Web Database GUIs to get at the database information, the user will get an i5/OS message indicating they are not authorized to access data

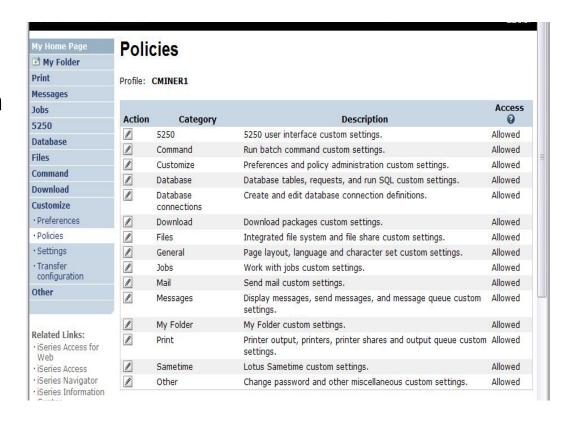


#### Customize → Policies

# Policies are used to control access to System i Access for Web functions

#### For example:

- A Files access policy can be set to Deny or restrict a user or group from accessing the file function.
- Policies are saved and associated with the appropriate iSeries user or group profile.
- Each 'Category' expands for granular control





#### Policies - customize for all users at once

#### One alternative...



# Use the \*PUBLIC group profile and set policies for all users

- 'Deny' functions for all users in a single step
- Then 'Allow' specific users access to functions via their User or Group profiles

#### **Problem:**

You're locked out too, until you go in and "Allow" functions to yourself

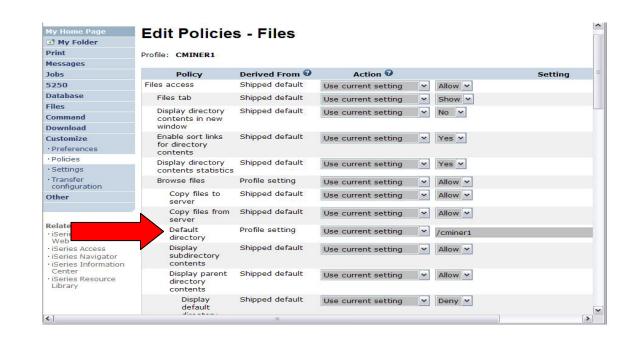




# **Example: Set Policy to Default to Specific Directory in IFS**

# Set a 'Default Directory' for:

- \*PUBLIC
- Groups of users
- Specific user



In this example, I went into CMINER1 profile, and set policy to show only the 'CMINER1' directory to this user...







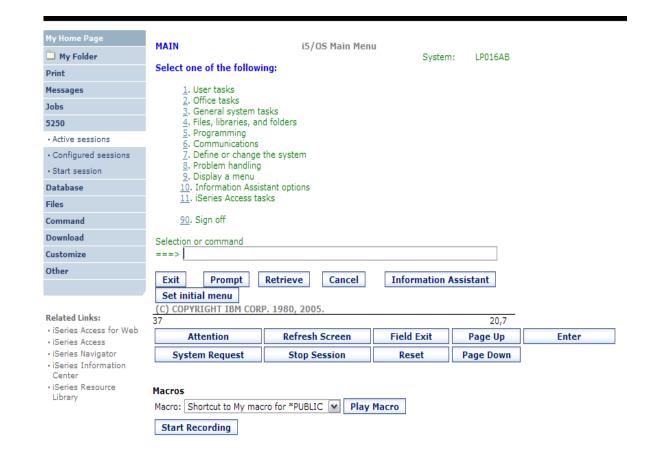
# System i Access for Web 5250 Interface

# Runs as an interactive job

 Only function in System i Access for Web that is interactive

#### TN5250 port

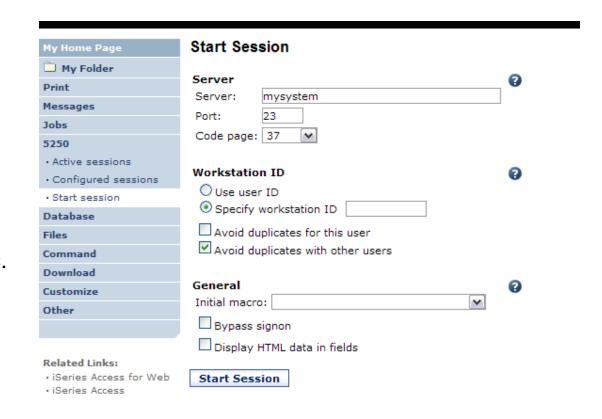
 Only function in System i Access for Web that uses TN5250 port





# **Use "Start Session" Dynamically**

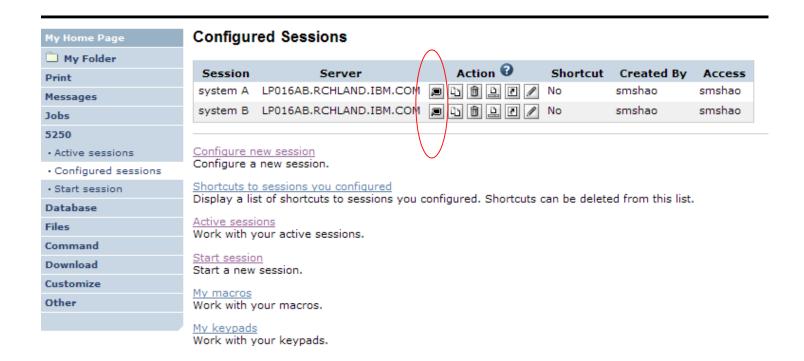
- Specify the system to connect
- Select the session attributes
  - Port, code page, workstation ID, etc.
- Start session





# **Start a Configured Session**

- Configured sessions list shows the list of sessions for the logged in user
- Select the "Start" icon for the session to start





## **Run Pre-Configured 5250 Sessions**

You can limit users to connecting to only specific systems or running only specific applications.

- Create preconfigured 5250 sessions
- Then set policies to restrict users to only preconfigured sessions
- User selects 'Configured Sessions'
  - Only link provided
  - User has only one action → to start a session

http://<systemi>:<port>/webaccess/iWAMain



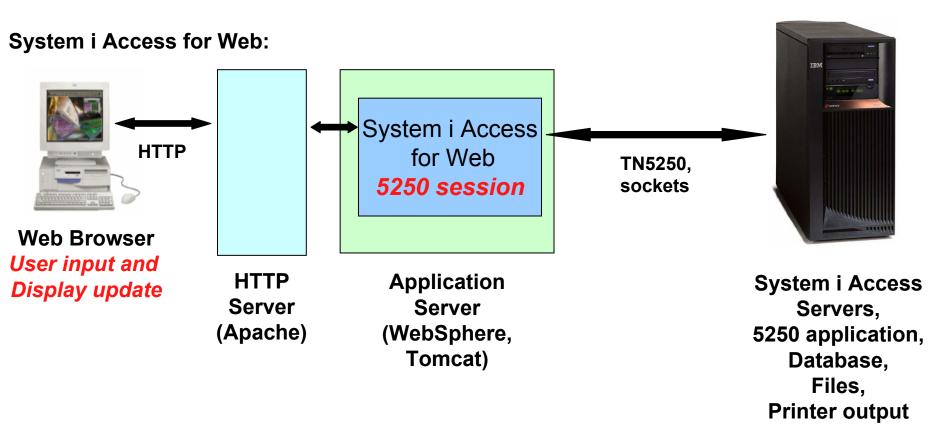


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### 5250 Environment: Windows PC5250 v. Web 5250

#### **System i Access for Windows:**







## Things to know

Because of the architecture on the previous chart—that 5250 session is implemented using HTML and that the 5250 session is separate from the user input and display update-- here are considerations:

- Not intended to replace full function emulators like PC5250, Host On Demand, etc. for purposes of "heads-down" data entry type of operations
  - Does not include graphics, EHLAPPI, DDE functionality
  - Does not provide keyboard mapping
  - Does not support certain keys the way PC5250 does (i.e., Field Exit)
- Does not include Printer Emulation (push to printer)
  - i5/OS strategy is Internet Printing Protocol (IPP) printing
  - System i Access for Web provides capability to convert spooled files to PDF
- No direct interaction with server, so unsolicited server messages can't be received.
  - Need to request refresh to see break messages
- Does not include file transfer from session







# **System i Access for Web – Database Functions**

Access database tables on your iSeries server with iSeries Access for Web.

#### **Tables**

- View a list of database tables on your iSeries server.
- Perform actions on these tables without having knowledge of SQL and its syntax.
- View the contents of a table in a paged list, using the Quick view action.
- Add and update records in a table using the Insert and Update actions.
- Create your own customized SQL request for a table using the Run SQL action.
- Create your own customized copy data request for a table using the Copy data to table action.

#### My requests

- View a list of previously saved requests.
- Run or Edit requests from this list.
- Manage lists using the Copy, Delete, and Rename actions
- Create and manage shortcuts to requests

#### Run SQL

- Run SQL statements dynamically.
- View output as a paged list or in a popular file format, like Microsoft Excel or Lotus 1-2-3. (Output
  format depends on how you have your browser configured and whether the browser can locate a
  plug-in for the output type you choose.)
- Customize how data is returned by setting options specific to the output type.
- Build SELECT statements using an SQL Wizard.
- Save requests for repeated use.

#### Copy data to table

- Copy existing data files from your PC to a database table on your iSeries server.
- These data files can be in many popular file formats, including Microsoft Excel and Lotus 1-2-3.
- Replace the contents of a table or add data to an existing table.
- Create a new database table based on the contents of a workstation file.
- · Save requests for repeated use.

#### Import request

- Import Client Access Data Transfer upload and download requests into iSeries Access for Web copy data and SQL requests.
- Imported requests are automatically converted to iSeries Access for Web format.
- Run and edit converted requests on your iSeries server just like other copy data and SQL requests.

#### Import query

- Import queries generated by Query for iSeries and DB2 UDB for iSeries Query Manager.
- Imported queries can be saved into iSeries Access for Web database requests.
- Run and edit converted queries on your iSeries server just like iSeries Access for Web SQL requests.

#### Extract server data

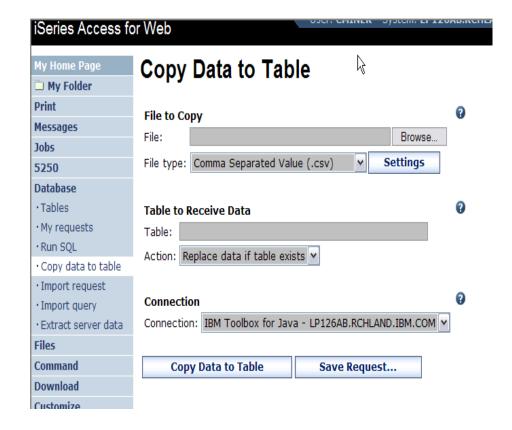
• Extract server object information into a database table.



### Upload PC Data to the System i

- Upload data from a variety of file types
  - Excel, XML, Lotus, etc.
  - OpenOffice new V5R4
- Put into iSeries database
  - 'Replace' contents of table
  - 'Append' to existing data
- If no table exists on the iSeries, you will get a wizard to help you create a new table



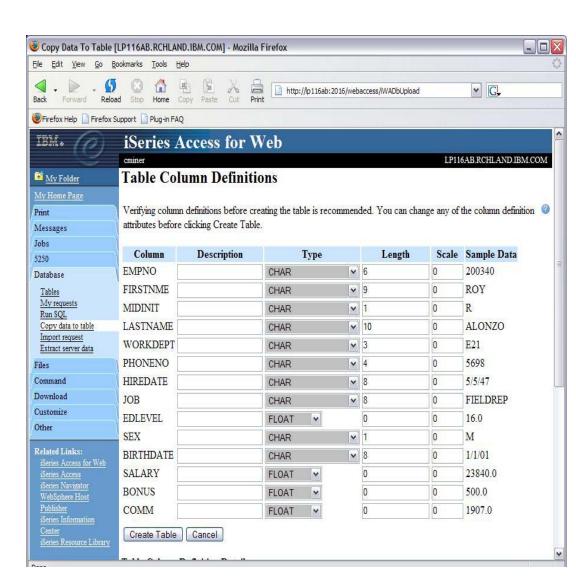




## **Create System i Table**



Wizard to help you create an iSeries table from your PC spreadsheet

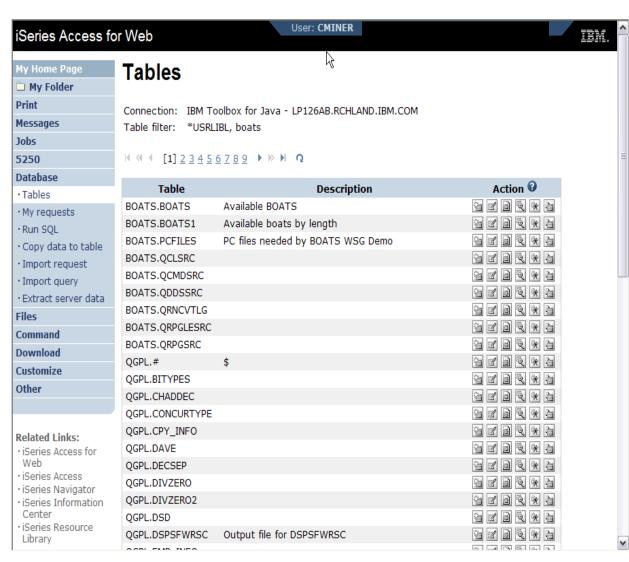




#### **Database Tables**

#### You can:

- Insert
- Update
- Quick View
- Find (new V5R4)
- Run SQL
- Copy Data to Table





# **Download Database Information from System i**

# Run SQL allows you to run SQL statements

 Could copy/paste complex SQL statements in here...

### Variety of output types

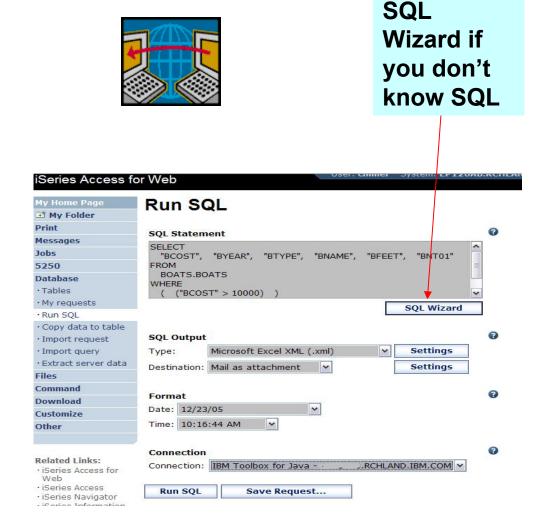
PDF, Excel, 1-2-3, XML, etc

#### **Destination**

- Browser
- Mail as attachment
- Personal Folders
- IFS (new V5R4)

#### Can save request

 My Requests, Give Shortcut to others





# Create Database Requests with SQL Wizard

# SQL Wizard enables you to:

- Select tables
- Select which columns to return
- Add conditions to your select statement
- Select the columns by which you want the data sorted

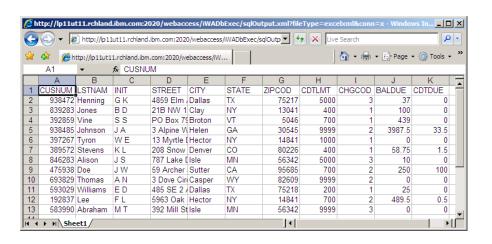


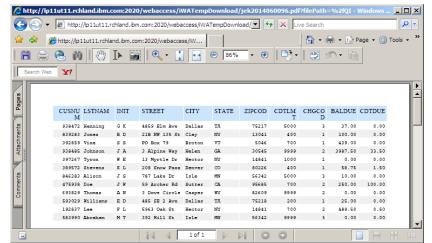


# New in V6R1! Chart SQL Results: Background

- System i Access for Web provides support to run SQL statements and store the results in a selected file format
- Historical supported file formats include:
  - HTML
  - Microsoft Excel
  - PDF
  - OpenDocument





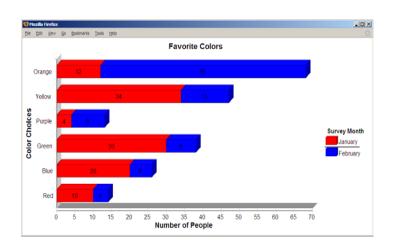


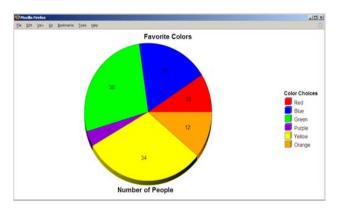


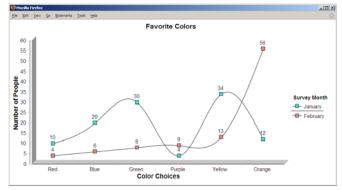
### Chart SQL results: SVG File Format

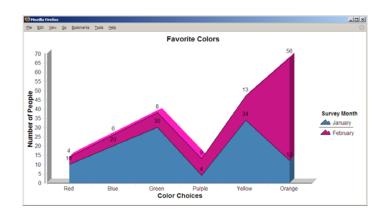
#### Support for new output file type in V6R1

- Scalable Vector Graphics Chart (\*.svg)
  - Language for describing 2D graphics in XML
  - W3C standard
- Users can store SQL results in a chart





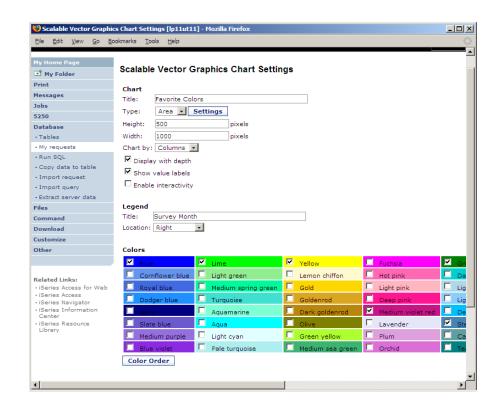






# **Chart SQL Results: SVG Configuration**

- Many configuration options
  - Chart type
    - Area, Bar, Pie, Line
  - Colors
  - Legend location
  - Grid shown
  - Chart type options
    - Bar vertical or horizontal
    - Pie exploded or complete
    - Line marker shape
  - Other....
- Same destination options:
  - Browser, mail, IFS, personal folder





iiim.

# **Database - Run Requests**



#### Administrator could:

- Give users or groups of users some database requests that were created for them.
- Users can run only these
- Series Information Shortcut to request upload Center · iSeries Resource H (( = [1] | ) >> ) Q Library specific requests No other database options offered

Series Access for Web

My Home Page

Print

5250

Database Action Created · My requests Request Description Shortcut BV Access Files Shortcut to Boats For Sale View all available boats Yes **CMINER** groupa Download Shortcut to Find Boat To Buy Select type and price **CMINER** \*PUBLIC Yes limits × Shortcut to My Customers Mailing Mail Customer List Yes **CMINER** groupa Related Links: \* Shortcut to My Customers Mailing Mail Customer List Yes cminer cminer1 · iSeries Access for Shortcut to Put My Customer List in Store Customer List Yes **CMINER** Web groupa Folder · iSeries Access · iSeries Navigator Shortcut to request sql \*PUBLIC Yes secyesi \*PUBLIC Yes secyesi

My Requests

| ( ( ( [1] | ) | ) | Q



# **Printing**





# Work with Printer Output, Printers, Queues

#### Typical end user printer tasks

- Printer Output
- PDF Printer Output



Tasks more oriented toward system operators, administrators, programmers, etc

- Printers
- PDF Printers
- Internet Printers
- Internet Printer Shares
- Printer Shares
- Output Queues





# **Work with Printer Output**

http://<myiseries>/webaccess/iWASpool

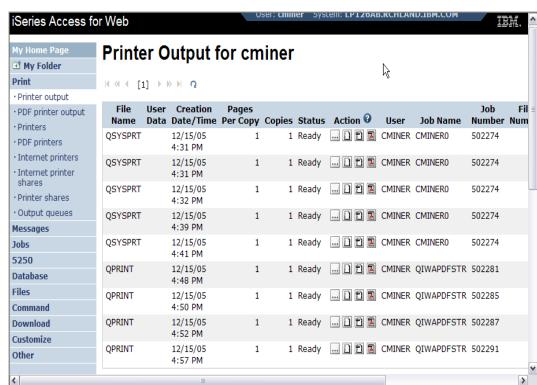
#### My 'printer output'

#### **Actions include:**

- Work with
- View
- View As
- View PDF

# Easy-to-use GUI for working with my printer output

 Don't need to sign onto a 5250 session, and run commands to get to spool file

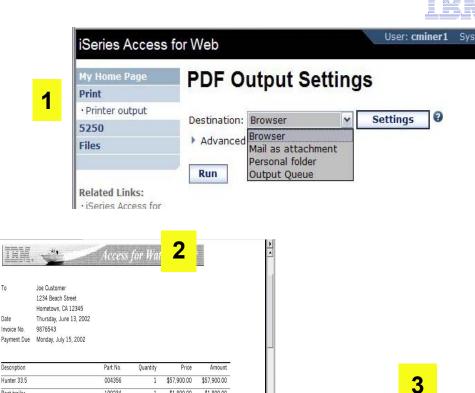


Note: IBM Infoprint Server (57xx-IP1) is NOT needed to use "View PDF"



# **Printer Output - Spoolfile**

- 1. Requested 'View PDF'
  - Can select any option on pulldown for my printer output
- 2. View in Browser
  - Shows overlays, etc
- 3. Send .PDF document in an email



Description Hunter 33.5 Can print on any \$1,800.00 \$1,800.00 Boat anchor FRFF printer in network iSeries Access for Web **Convert Printer Output to PDF** Print · Printer output From: cminer@us ibm.com 5250 Files Related Links: ◆ H + 1 of1 → H 8.5 x 11 in □ 片 岩 + · iSeries Access for iSeries Arress iSeries Navigator · iSeries Information Mail server does not iSeries Resource Library have to be installed on Attachment: QSYSPRT.507343.CMINER1.CMINER10.3.PDF **iSeries** Cancel



# **PDF Printer Output**

http://<myiseries>/webaccess/iWAPDFPrinterOutput

# Printer output automatically converted to PDF and placed in PDF Printer Output Queue at spool time

#### **Actions include:**

- -View
- -Copy to File
- Copy to Folder;
  Delete

Note: IBM Infoprint Server (57xx-IP1) needed to use "PDF Printer Output" and "PDF Printers"

-Mail

Actual host application could additionally send spooled file to another output queue (in SCS or AFP mode)





# Many other functions in the product!



We briefly covered only three areas: 5250, Database, Print







#### New in V6R1!

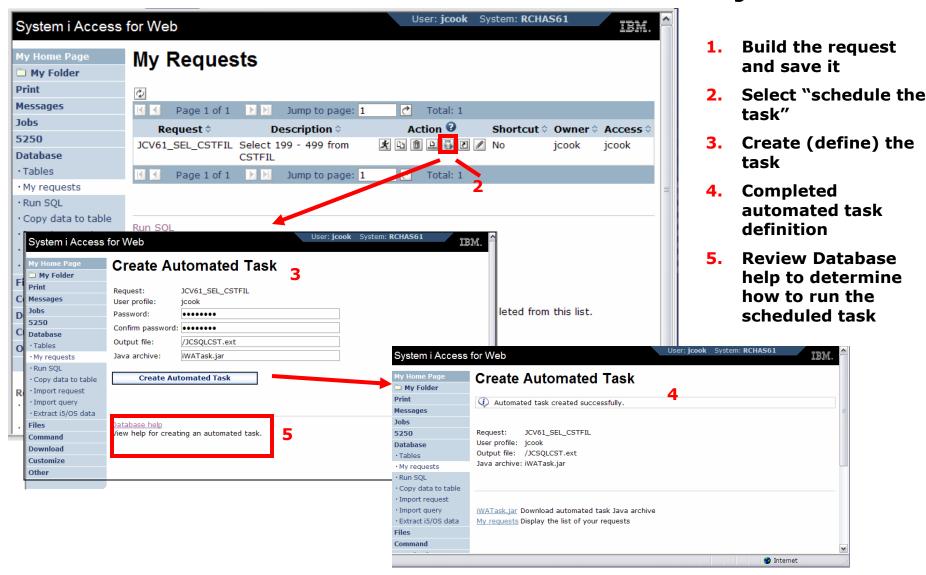
# Single sign-on via Windows domain login – V6R1

- WAS 6.1 provides a trust association interceptor (TAI) that uses the Simple and Protected GSS-API Negotiation Mechanism (SPNEGO) to securely negotiate and authenticate HTTP requires for secured resources in WAS.
  - This uses kerberbos authentication.
  - The SPNEGO TAI enables Windows domain login to be used when granting access to secure resources in WAS.
- When V6R1 System i Access for Web is configured in a SPNEGO TAI
  environment, the Windows workstation user can login to the Windows domain
  and have Access for Web use those credentials to authenticate to i5/OS



#### New in V6R1!

## Schedule tasks: Create automated task as a .jar file





# **Summary**

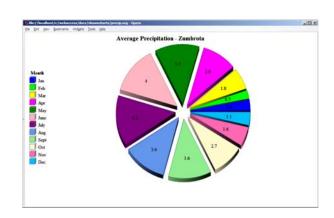




# System i Access for Web V6R1 Enhancements



- Single sign-on: support authentication using Windows domain login
- Chart SQL results in bar, area, line, or pie chart
- SQL wizard supports joins of multiple tables
- Automation and scheduling of tasks
- JSR 168 Portlets



Functional enhancements can be submitted via the FITS system. The url is: <a href="http://www.ibm.com/systems/i/software/access/">http://www.ibm.com/systems/i/software/access/</a>

And click on link "Request for Design Change"



### Why use System i Access for Web? Start simple, grow fast...

- Any System i customer -- with any hardware model can quickly get started working in a Web environment
  - ► If their system is not capable to running WAS, they can easily install the ASF Tomcat web application server. ASF Tomcat runs on hardware with 70 CPW and 256 MB memory
- Any System i customer -- with little Web experience can easily get started working with e-business
  - System i Access for Web is simple to install and configure
  - No programming skills required to set it up
- Any System i customer -- without training or setup on users' desktops can extend the reach of their resources to end users
  - Use customize facility to set up view ('window') to System i and to control access to various i5/OS resources
    - all built around i5/OS user profiles

A great first step to get System i into ebusiness





#### **Additional Information**

- System i Access Family Home page:
  - http://www.ibm.com/systems/i/software/access
- System i Access for Web Home page:
  - http://www.ibm.com/systems/i/software/access/web/
- Demo of System i Access for Web:
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