

## Get to Your i5/OS with a Browser: System i Access for Web V6R1

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#### System i Access Sessions/Labs

#### Presentations:

- J11 System i Access: ; What's New in Windows and Web?
- F15 System i Access for Web: Run 5250 in a Browser
- J23 Get to Your i5/OS with a Browser: System i Access for Web V6R1 (Overview)

#### Labs

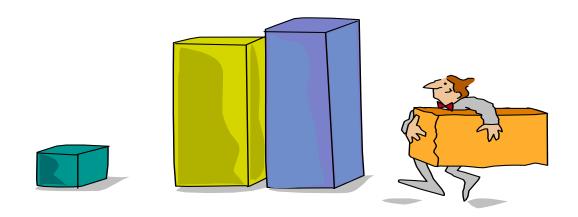
- H12 System i Access for Web Using the Functions
- H13 System i Access for Web Configuration
- H22 Administrator's First Steps to Customize System i Access for Web
- H24 System i Access for Windows: Basic or Advanced

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"



## **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, <b>V5R3</b>
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	V5R3 i5/OS customers not wanting to upgrade to V5R4 i5/OS but want the V5R4 iSeries Access Family clients can order no-charge Feature No. 2648 of Product No. 5722-XW1



#### **Products - Focus**

Description	Product	Product Number	Need 5761-XW1 or 5722-XW1 to use?
Family Name	➤System i Access Family	5761-XW1	
Windows client	➤System i Access for Windows	5761-XE1	Yes (for 5250 and Data Transfer)
Linux client	➤System i Access for Linux	5761-XL1	Yes (for 5250)
Browser Access	➤System i Access for Web	5761-XH2	Yes
Handheld / Wireless offering	➤System i Access for Wireless ➤iSeries Toolbox for Java ME	5722-XP1	No
i5/OS systems management	➤System i Navigator ➤Operations Console	Packaged in 5761-XE1	No

- 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
- ☼ Note: 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

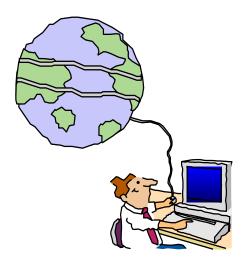
- System i Access Family (5722-XW1 or 5761-XW1) unlimited user feature included with the following System i hardware
  - System i Model 515 Express configurations
    - See Announcement Letter 107-181 dated 4/1/07 for more details
  - System i Model 525 Express and CBU configurations
    - See Announcement 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





#### **Table of Contents**

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





#### 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

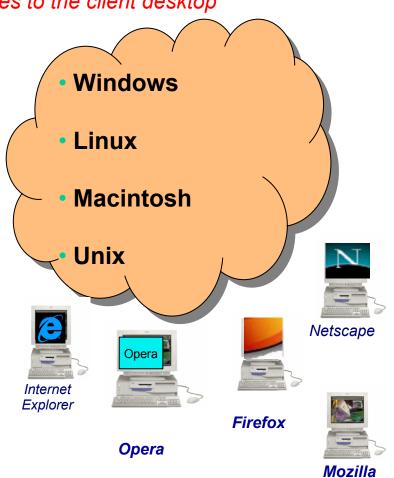
through a web browser

## 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:

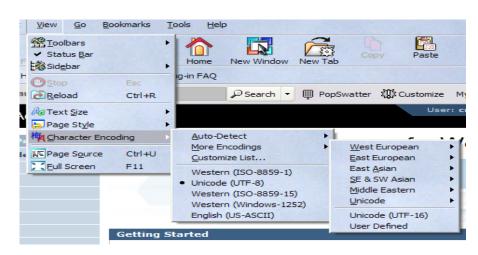
- Is server based
- Requires only a browser on the client, no configuration required at desktop, no applets installed on desktop
- Uses industry standard protocols -HTTP, HTTPS and HTML

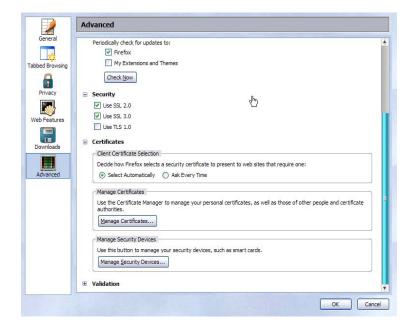




### Fully Integrated with your Browser

- 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





#### 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

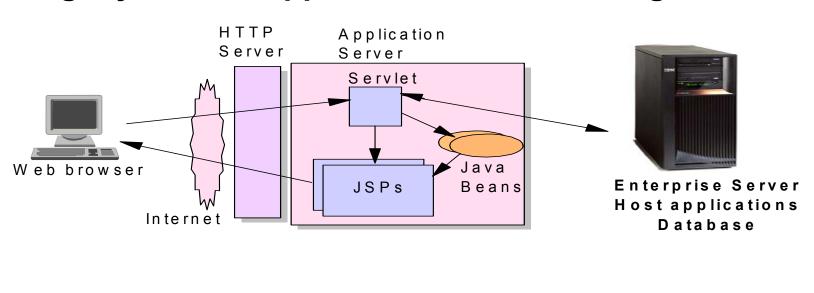
- Bookmarks
- Change Password
- Connection Pool
- Status
- Trace

#### 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
  - Available in the DG1 group PTF
    - V5R4 SF99114 level 6 or later
    - V5R3 SF99099 level 15 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

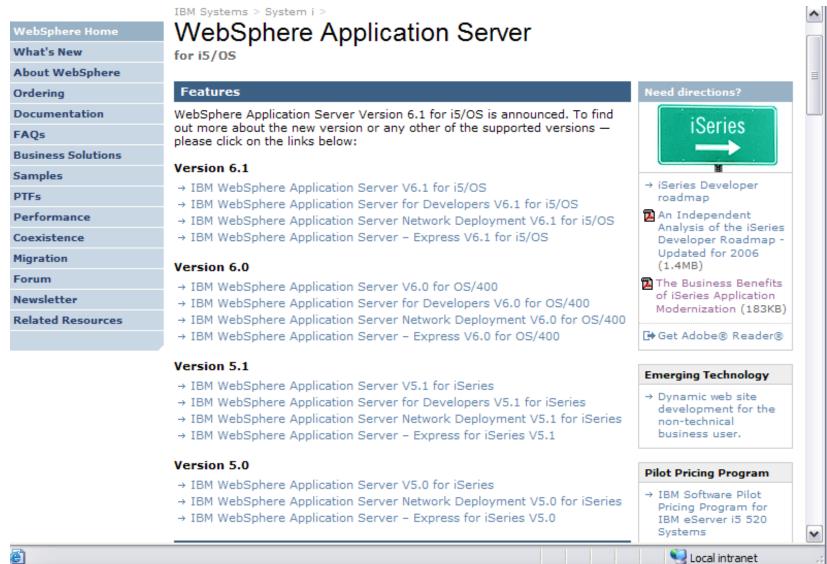
#### System i Access for Web within this environment

## Step-by-step: Use V5R4 iSeries Access for Web within the V5R4 or V5R3 i5/OS integrated Web application server

- 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
  - V5R3 SF99099
- 3. Load/apply latest V5R4 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
  - <a href="http://system\_name">http://system\_name</a>:2020/webaccess/iWAMain
- 8. Done!



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



#### Is your System i ready?

Under 512Mb Under 300 CPW Bxx, Cxx, Dxx, Exx, Fxx S10, S01, Pxx S20 / #2161, #2163 100, 150 170 / #2159,#2160,#2164,#2289,#2290,#2291,#2292 #2407, #2408,#2409 200, 20S, 250 270 / #2422,#2423, #2424,#2248,#2452,#2454

3xx, 4xx 500, 510, 50S 53S / #2154 530 / # 2150, # 2151 600 620 / #2175,#2179,#2180,#2181 720 / #2061 820 / #2425,#2426,#2457,#2456

512Mb-1GB 300-500 CPW \$30 / #2257 \$20 / #2170,#2165 170 / #2176,#2183,#2383,#2384,#2385,#2386 270 / #2250,#2431 53\$ / #2155 530 / #2150,#2151 600 / All 620 / #2175,#2179,#2180,#2181 720 / #2161 820 / #2425,#2426,#2456,#2457

WAS Express with few concurrent users

Over 1GB And 500 CPW SB1,SB2,SB3,S20(1),S30(1),S40,170 / #2388 270 / #2252,#2253,#2432,#2434 53S / #2156,#2157 530 / #2153,#2162 730,740,800 / #2464 810,825,870,890,i5 520,i5 550,i5 570,i5 595 / All

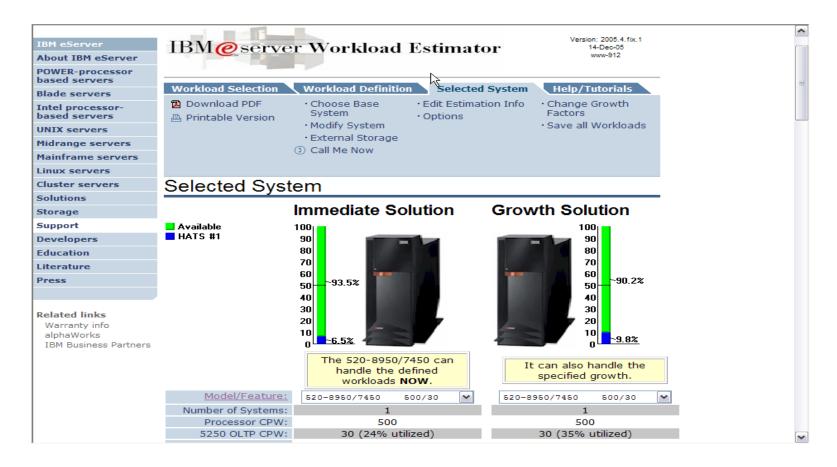
Complex web applications with many concurrent users



#### Performance Considerations...

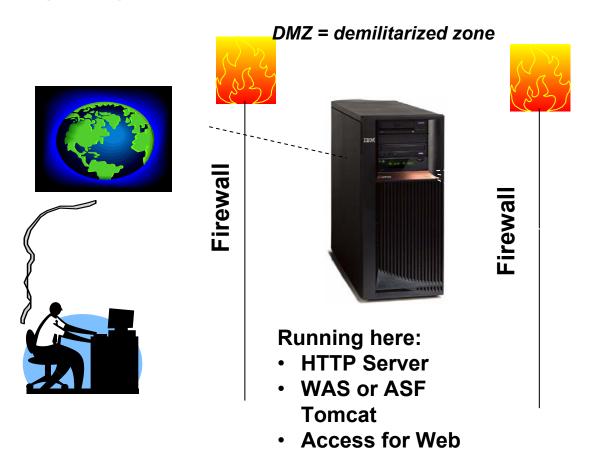
#### **Use the IBM Systems Workload Estimator at**

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





## Setting up your web application server



**Systems** users actually accessing **Install Access for** Web (RSTLICPGM)

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

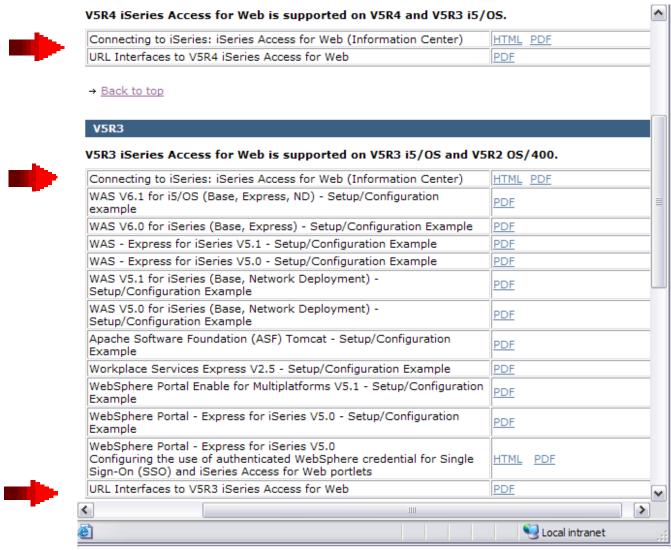


### Get System i Access for Web running

- 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...



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	Base	w/HW
	V6R1 System I Access for Web: V5R4 or V6R1 i5/OS		
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	<ul> <li>One, or more, of the following web servers</li> <li>WebSphere Application Server V6.1 for i5/OS (all three editions)</li> <li>WebSphere Application Server V6.0 for OS/400 (all three editions)</li> <li>WebSphere Application Server V5.1 - Express for iSeries</li> <li>WebSphere Application Server V5.1 for iSeries (Base and ND)</li> <li>WebSphere Application Server V5.0 - Express for iSeries</li> <li>WebSphere Application Server V5.0 for iSeries (Base and ND)</li> </ul>	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> <li>WebSphere Portal Enable for Multiplatforms V5.1.0.1</li> </ul>		
*	<ul> <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.

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

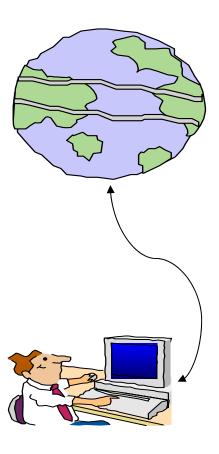


### 4 CL Commands in System i Access for Web

- 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'

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- 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

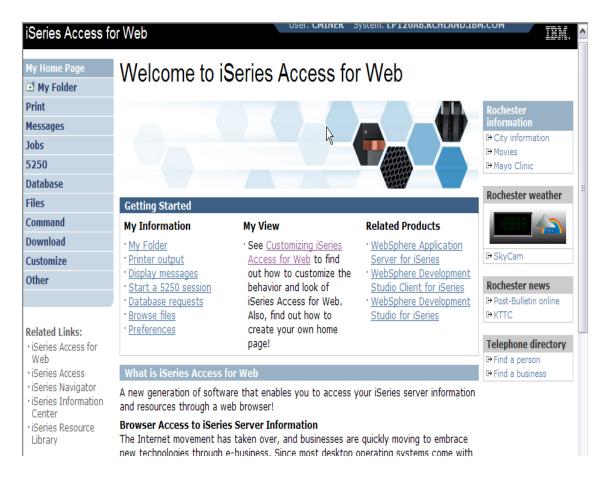


#### **Home Page entry point**

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



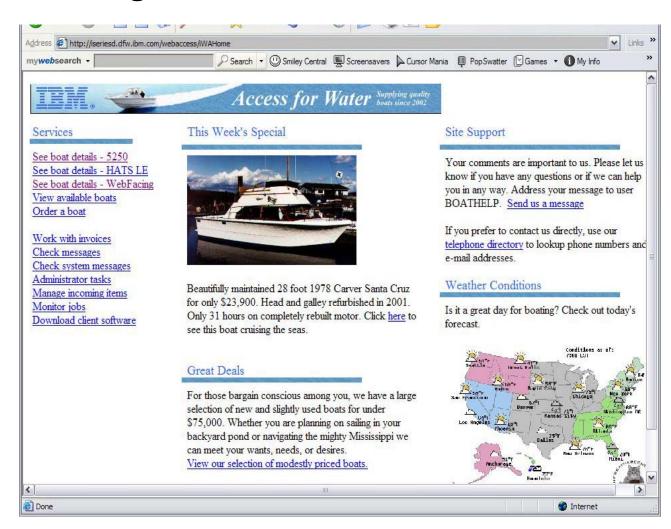
- One view and set of functions for the Accounting department
- Another view and set of functions for the Warehouse staff



#### **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...



http://iseriesd.dfw.ibm.com/webaccess/iWAHome



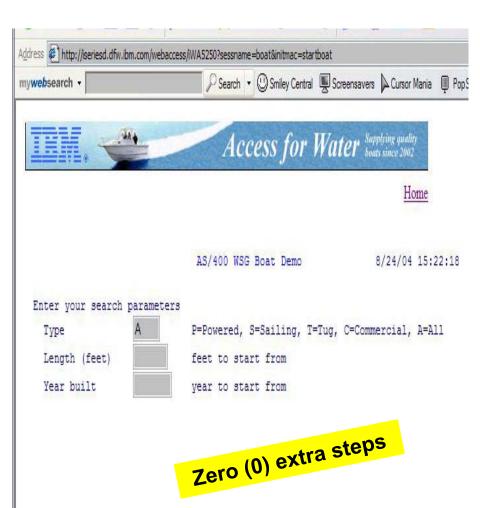
## Using 5250 emulator in System i Access for Web

# 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)





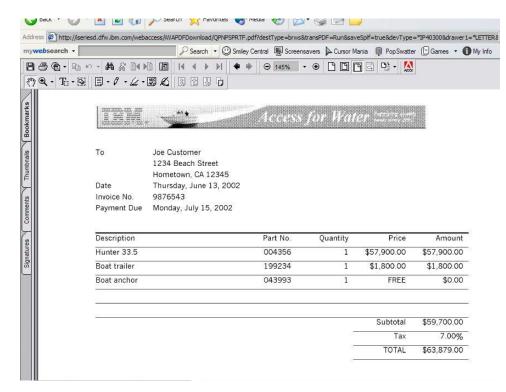
#### Task Oriented – not function oriented...

#### 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

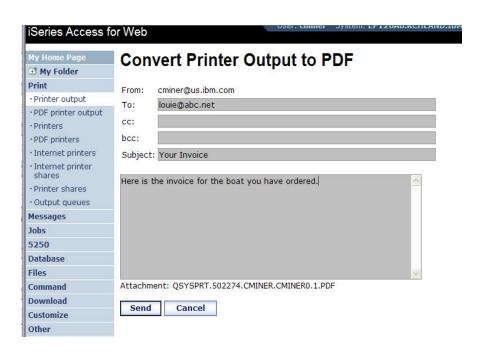
## E-mail is integrated with System i Access for Web

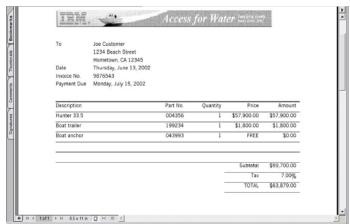
- Your mail server can be anywhere in your network
- Users receiving your e-mail need only an e-mail address

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.

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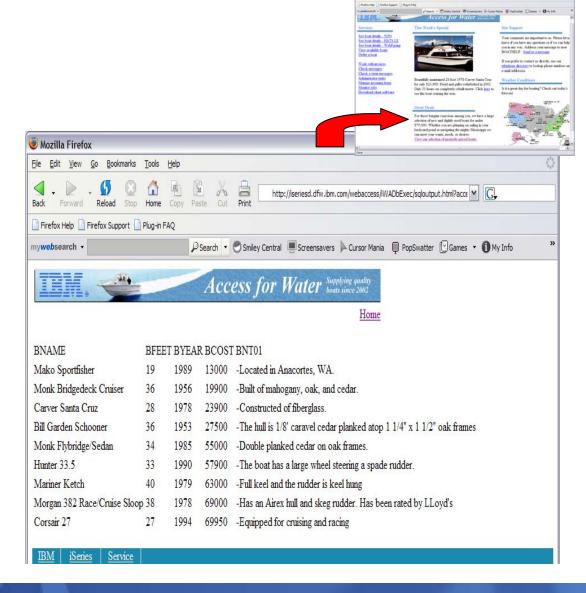




### Run an i5/OS Database Query

# 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.dfw.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

- Click on the "Articles" link on the lefthand side of screen.
- 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 benedit? (Secies managers and idealtop administrators who want to Who enable their (Sed exapplications.)

 What you'll learn: White's step-by-step actide details how shops can use itselfes.
 Access for the Web to provide browses-based access to itselfes applications and data. Because (Section Access for Web to Implemented as a set of Java seculate that cun on the 18-cies secure, only a browser is dequired on the dient.

· Bottom II no: Elyout 18-cine exerce to past of your company's Intranet, you can use 18ectes Access for Web to provide names to your resources for others within your company. If your 1840144 server is part of the Internet, you can use 184044 Access for Web to provide access to your resources for your customers and suppilets. In this case, you also need to provide your customers and suppliess with a user profile to access your isedes server. Regrediess, through isedes Access for Wild, I Section shope to extend their host applications and data to a brownesh and environment and give both usess and business partners access over the Web.

#### uild a quick and easy Web site with iSeries Access for Web

You can build a quick and every Web eith for your company with the customization support of 15 view Access for Web. No Para programming is required. You simply each HTML files and set configuration options. In this action, I demonstrate this applicitly by consting NM selected to the function. This incommution is because of the function. tionality available with the VSR2 celeage of i8-cite Access for Web. Past introduced by IEM in September 2001, it provides a browse interface to iSeries resources, such as DB2 UDB, printer output, and O8/400 CL commande

#### Home page and template files

iSecies Access for Web ships a default home page. This page is displayed when you access the home page ORL http://cepstem>/webaccess/iWAHome. The default home page is stocked in the 18-cine integrated file system in the Editoring Ioostica: /QUEM/PoolDate/Access/Web2/html/hom-spage.html

iSeries Access for Web also ships a default template file. The template file contains the HIMIL-course displayed at the top and bottom of each iSeries Access for Web content page. The location of the default template file is /QIBM/Poot Datey Access/Web/Intri) web access hard. The %% values in the template file are replacement tage. We will diessee these lates in the actide.

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 /QDDd/ProdData eince this diseason tow is intended only for product files. Instead, we canable a new directory named /boxbs/hamepage and place our files in it. Our austomized home page contains link ato view and order brants. Our quetomized template Ble contains the company's logo. We disques details of the Ble containts lates in the actide.



Janet Weber tean ndoteory eofburge enginees in the IBM. Rochester Minn eesta labo

catody. She have haid a coast ety of colession the IPC Suppliest, Client. Access and (Sed as Access peoducte. Hee focus how been on programming interface. Jan & e automity a member of the (Section A company) on White discoulop ment beam.



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

Use 'out of the box'



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



Use the WebSphere Portal solution



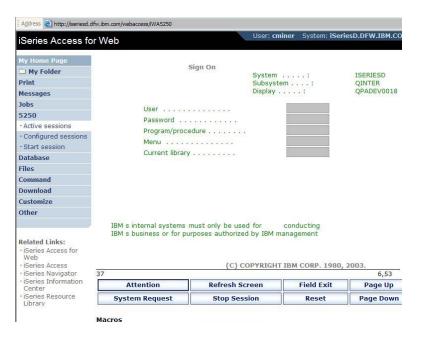


# System i Access for Web has many entry points

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

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

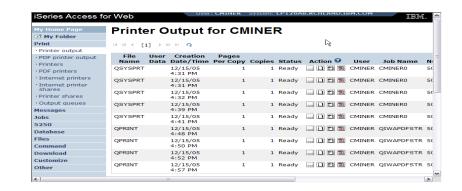
http://<myiseries>/webaccess/iWA5250



http://<myiseries>/webaccess/iWAMain

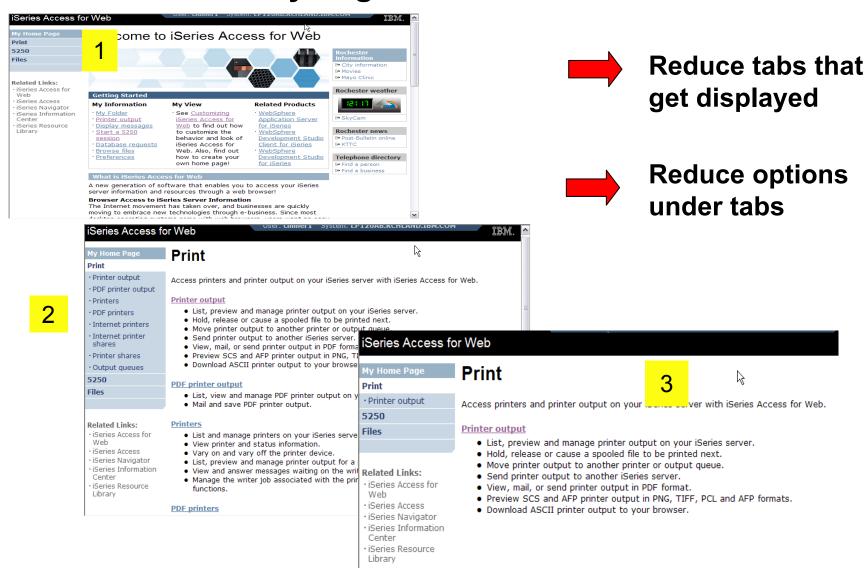


### http://<myiseries>/webaccess/iWASpool





### Reduce functions you give to users

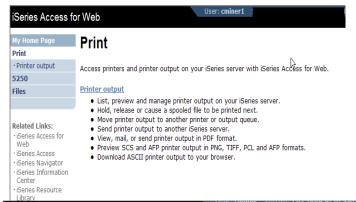




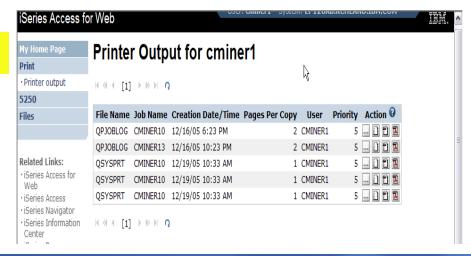
## **Printer Output - Spoolfile**

#### 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** Mv Folder 4 4 4 [1] b b b Q File User Creation Pages Name Data Date/Time Per Copy Copies Status Action 🚱 · PDF printer output · Printers OSYSPRT 12/15/05 1 Ready ... | The man CMINER CMINERO · PDF printers Internet printers OSYSPRT 12/15/05 1 Ready ... D TO TO CMINER CMINERO 502274 Internet printer OSYSPRT 12/15/05 502274 Printer shares Output queues OSYSPRT 12/15/05 1 Ready ... D TO E CMINER CMINERO 502274 OSVSDRI 12/15/05 QPRINT 12/15/05 4:48 PM ... D E CMINER QIWAPDFSTR 502281 Database QPRINT 12/15/05 4:50 PM ... | CMINER QIWAPDESTR 502285 12/15/05 Download OPRINT 1 Ready ... D E CMINER OIWAPDFSTR 502287 Customize Other





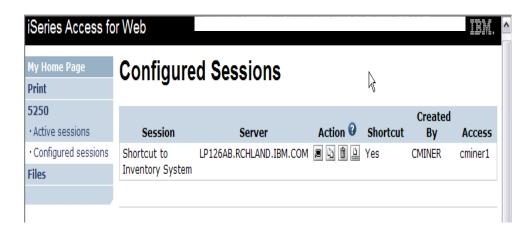
# Run Pre-configured 5250 Sessions

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





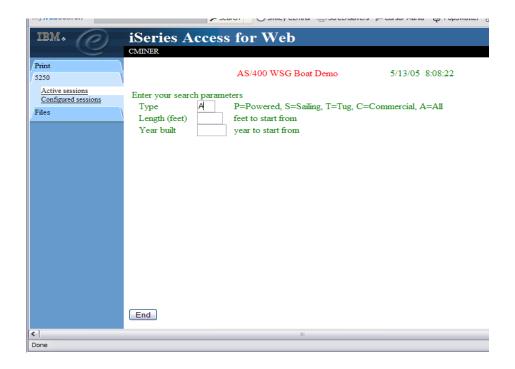




# User can run 5250 application

# 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



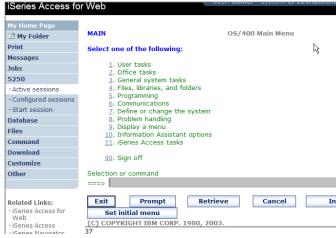


Change look of 5250 session

1. Default 'web' look

2. Changed colors, added keypad at side, changed buttons at bottom to words

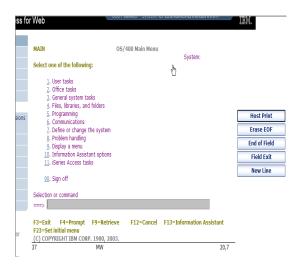




2

- 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



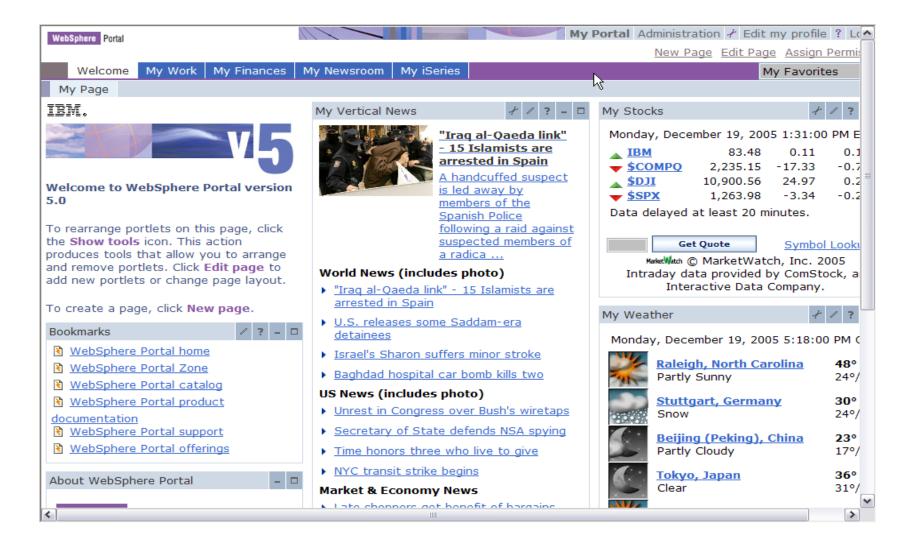
# Portal Solutions – the next wave in technology

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)

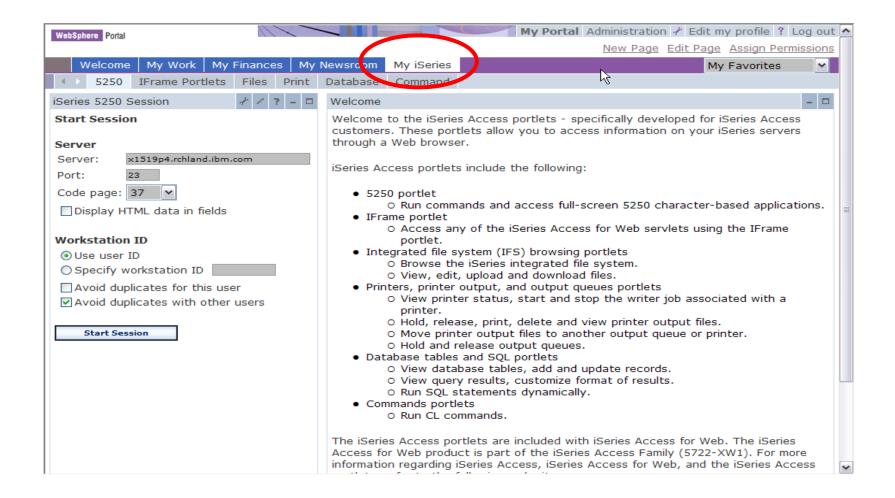


#### Portal built on i5/OS





# System i Access for Web Portlets on System i Portal





# Portlet Support added to System i Access for Web

V5R4	V5R3 PTF SI11914 (May 2004)	V5R3 (Jan 2004)
<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





- 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**

My Home Page My Folder Print Messages Johs 5250 Database Files Command Download Customize Preferences Policies Settings Transfer configuration Other

- 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

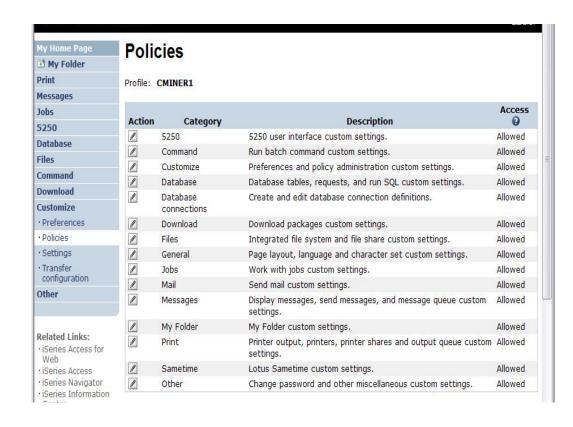


#### Customize → Policies

# 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

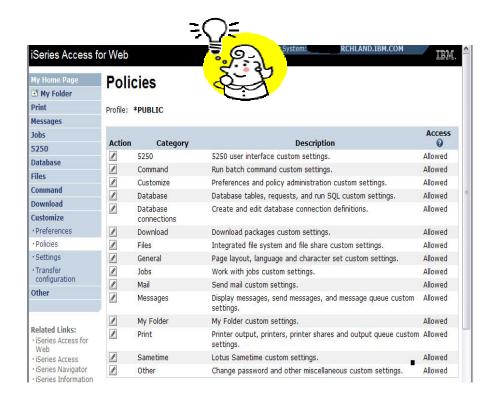
One alternative...

# 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...





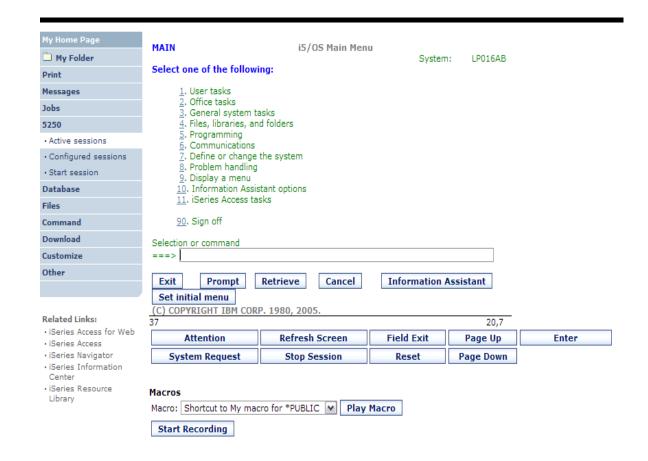
# System i Access for Web 5250 Interface

Runs as an interactive job

 Only function in System i Access for Web that is interactive

#### TN5250 port

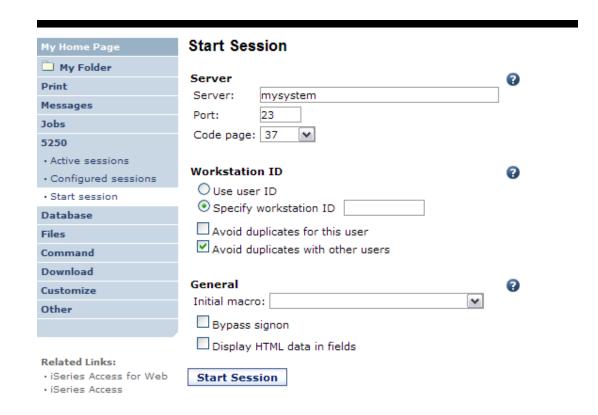
 Only function in System i Access for Web that uses TN5250 port





# **Use "Start Session" Dynamically**

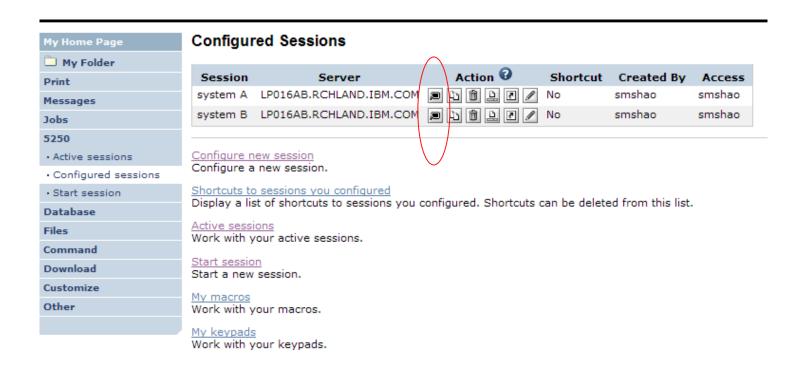
- Specify the system to connect
- Select the session attributes
  - Port, code page, workstation ID, etc.
- Start session





## **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



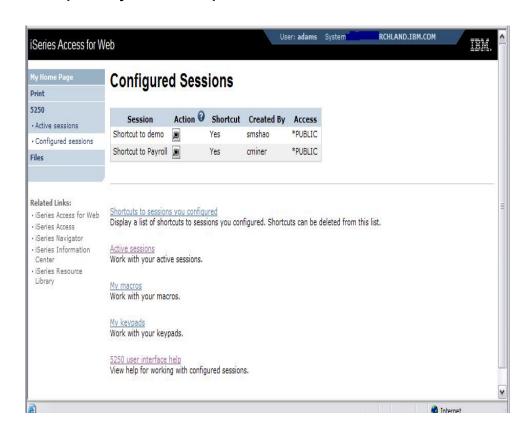


## **Run Pre-Configured 5250 Sessions**

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



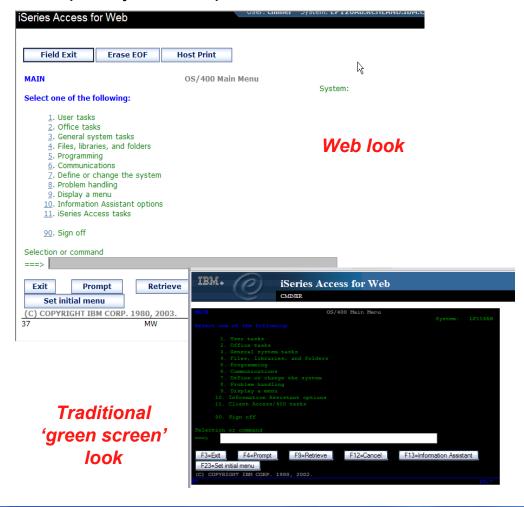


## **Run Pre-Configured 5250 Sessions**

If you do not want users using anything in System i Access for Web except 5250, you could:

- Simply give them the 5250 url address (ie, http://systemi/webaccess/iWA5250)
- Set policies so users end up where you want them to be
  - Could include a macro so user bypasses i5/OS sign-on screen
- Predefine what screens will look like:
  - Colors
  - No Navigation pane

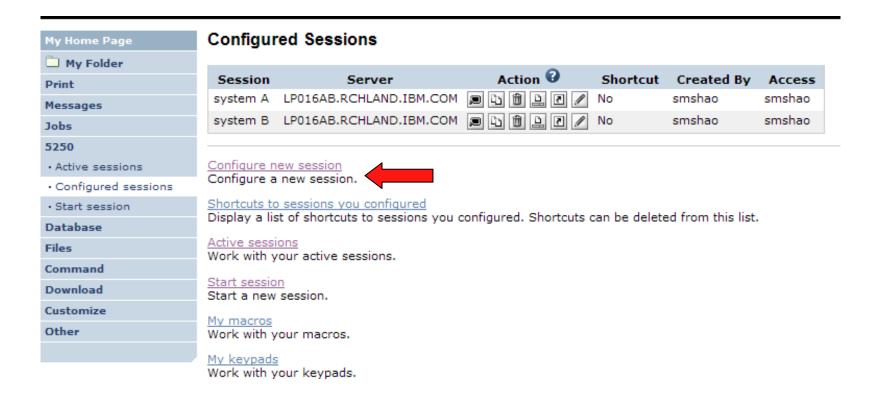
http://<systemi>:<port>/webaccess/iWA5250





# **Configure a New Session**

### Select the "Configure new session" link





# Setting up a 5250 Session

#### Select Session Name

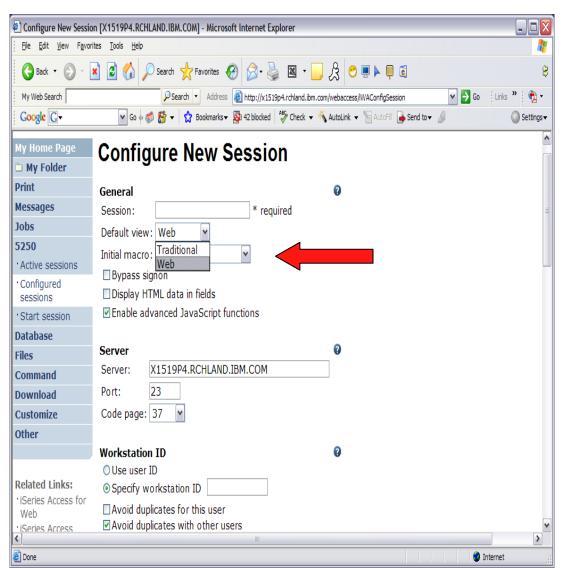
Name of this 'Configured' session

#### Determine screen look

- Web View is default
- Traditional View can be selected

### Select System i to connect to

- Enter System Name or TCP/IP address
- Port Address





# Things to know

Because System i Access for Web 5250 is implemented using HTML and is servlet based, there are considerations to be aware of. This 5250 interface...

- is not a full-function emulator
  - does not have keyboard interaction and keyboard mapping capability of full-function E.g., 'field exit' cannot be done with one keystroke.
- is not intended to replace full-function emulators like PC5250, PCOMM, Host On-Demand, etc. for purposes of "heads-down" data entry type of operations
- does not include file transfer from session.
- does not include printer emulation
  - i5/OS strategy is Internet Printing Protocol (IPP) printing
  - System i Access for Web provides capability to convert spooled files to PDF
- does not include graphics, EHLAPPI, DDE functionality
- does not have direction interaction with server, so unsolicated server messages can't be received. (The user needs to request refresh or take an action on the interface to see break messages)





# 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 gueries 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



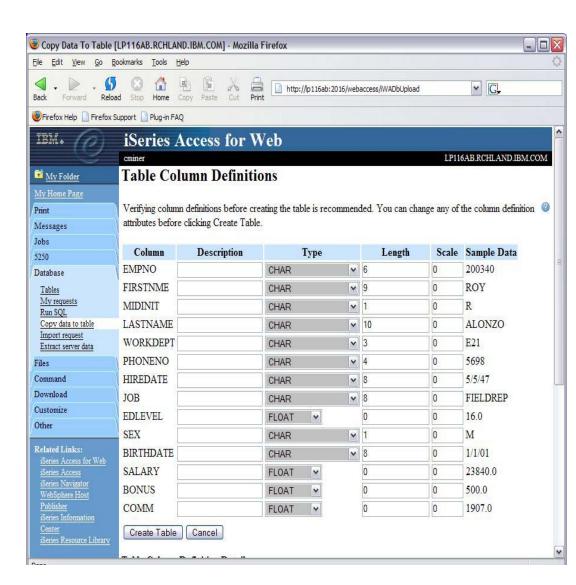




### **Create System i Table**



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

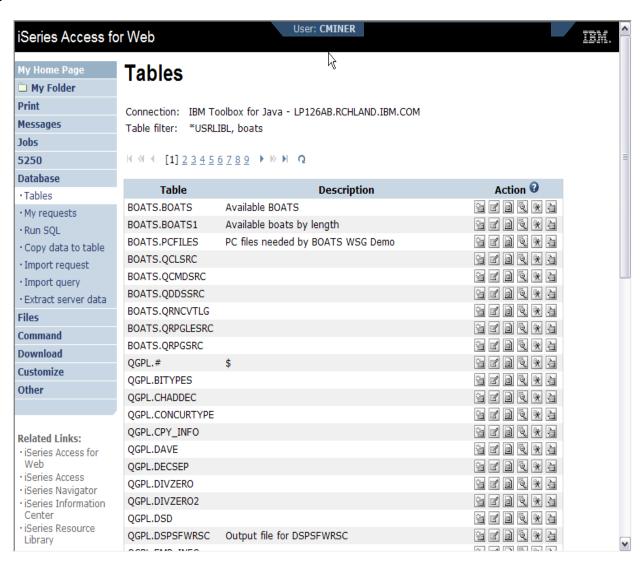




### **Database Tables**

#### 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

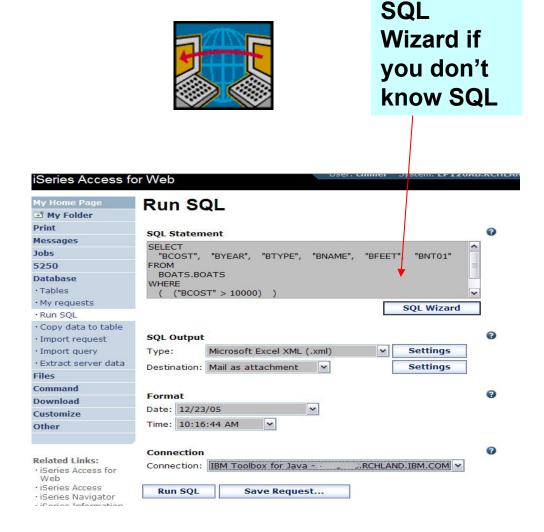
PDF, Excel, 1-2-3, XML, etc

#### **Destination**

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

### Can save request

 My Requests, Give Shortcut to others

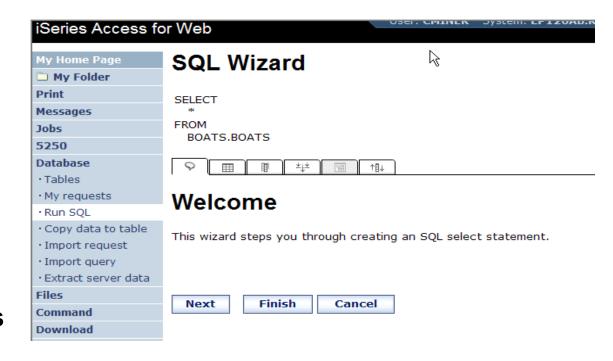




## **Create Database Requests with SQL Wizard**

# 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





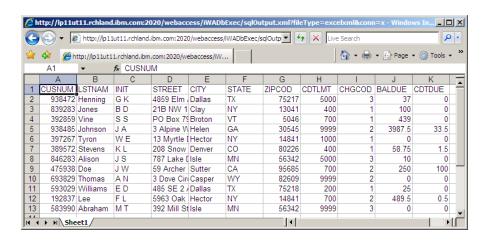
# New in V6R1! Chart SQL Results: Background

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

74

OpenDocument





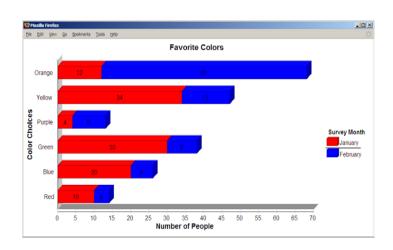


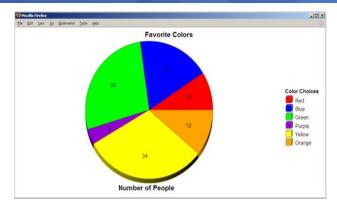


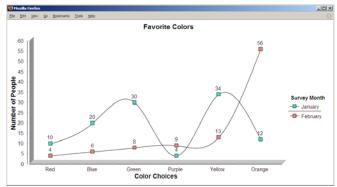
#### **Chart SQL results: SVG File Format**

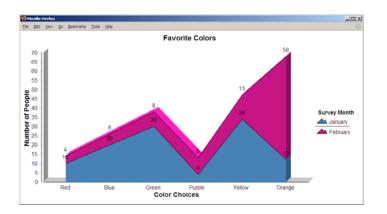
#### Support for new output file type in V6R1

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





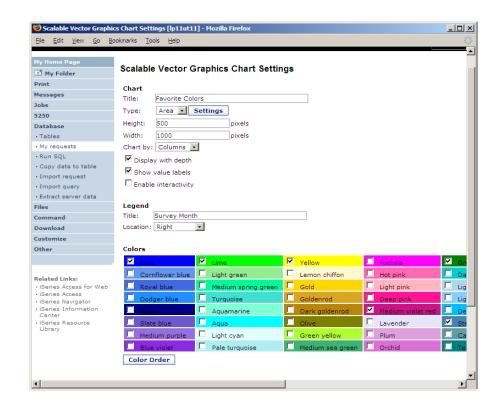






# **Chart SQL Results: SVG Configuration**

- 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



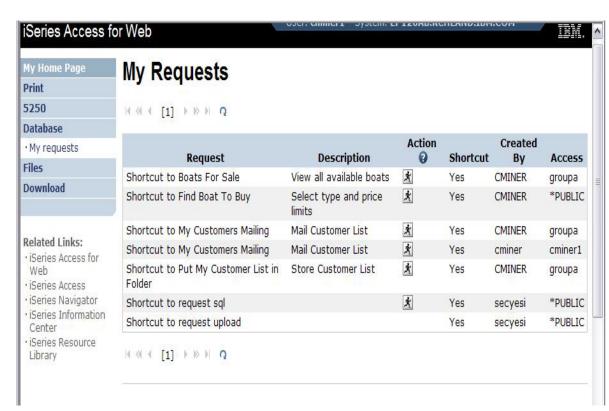


#### **Database - Run Requests**



#### Administrator could:

- Give users or groups of users some database requests that were created for them.
- Users can run only these specific requests
- No other database options offered





# **Printing**



# Work with Printer Output, Printers, Queues

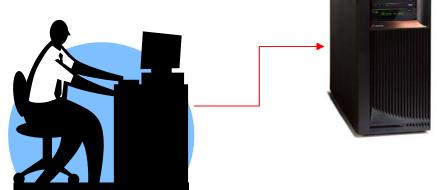
#### Typical end user printer tasks

- 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

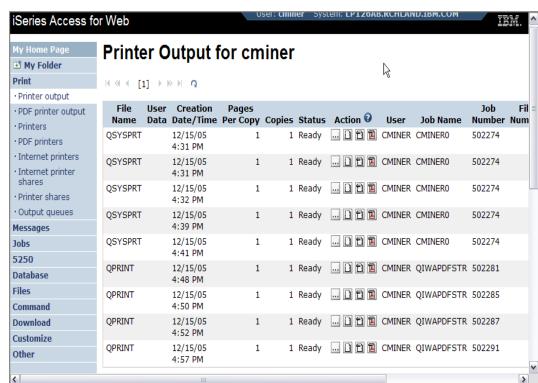
#### My 'printer output'

#### **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

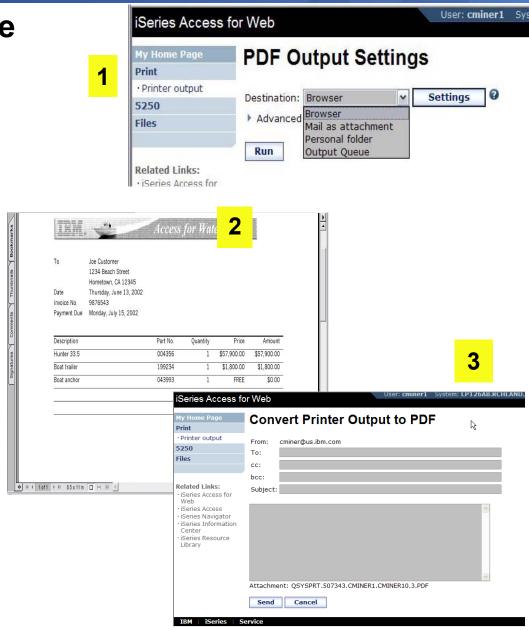


Note: IBM Infoprint Server (5722-IP1) is NOT needed to use "View PDF"



## **Printer Output - Spoolfile**

- 1. Requested 'View PDF'
  - Can select any option on pulldown for my printer output
- 2. View in Browser
  - Shows overlays, etc
  - Can print on any printer in network
- 3. Send .PDF document in an email
  - Mail server does not have to be installed on iSeries





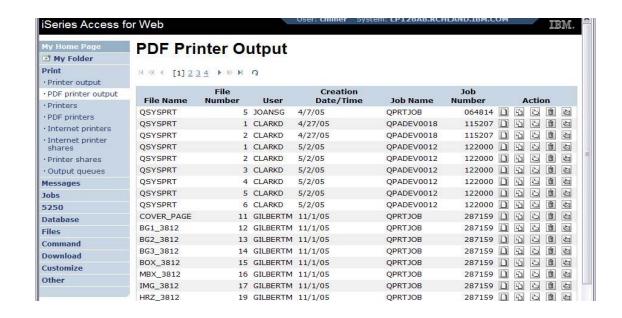
## **PDF Printer Output**

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
- –Mail



Note: IBM Infoprint Server (5722-IP1) needed to use "PDF Printer Output" and "PDF Printers"

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



# **My Folder**





## My Folder

#### Folder resides in the IFS

- Folder does not show up in IFS directory listing
- Administrator can control size of Folders (new in V5R3)

#### Folder can only be accessed by owner

- Good for long-running requests (ie, actions performed asynchronously so the browser is not tied up)
- An easy way to avoid large attachments (ie, a large query result)

# Can place information in other users' Folders

- -Performing requests for someone else
- Mechanism for workflow.

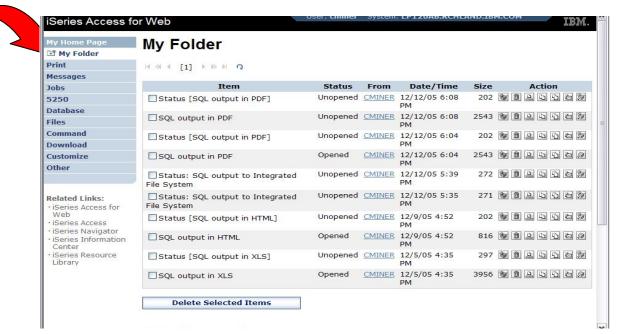
# Combine e-mail and My Folder functions to:

- Perform requests for someone else
- Distribute results to a group of users
- Send e-mail to others when you place information in their Folder
- Be notified when new items are placed in your Folder



# Simply click on 'My Folder' to see items

- Can store items, email them, delete them, etc
- Do not need to understand any Directory structure to put information in My Folder or another's Folder





#### **Downloads**





## Downloads – for file/program distribution

http://<myiseries>/webaccess/iWAPackages

- Mechanism to distribute files / programs to users
- Administrator can create downloads
- Management functions included for updating downloads and for controlling access to them









#### New in V6R1!

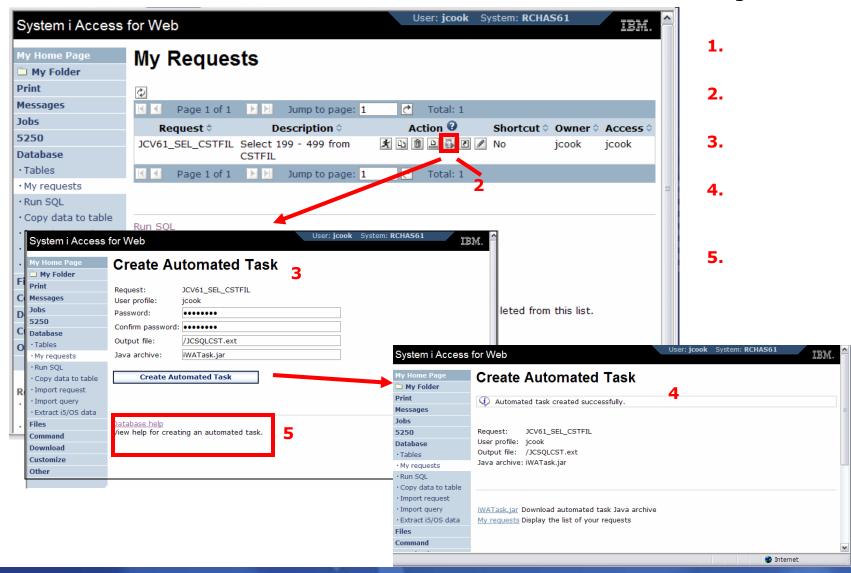
# Single sign-on via Windows domain login – V6R1

- 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**





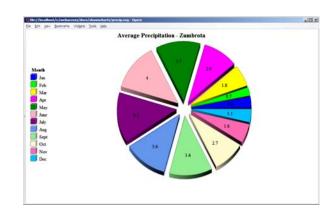
# System i Access for Web V6R1 Enhancements



- 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







# 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 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:
  - http://iseriesd.dfw.ibm.com/webaccess/iWHome



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