# Get to the Web Fast with IBM i Access for Web: Including 5250 Browser Access

Session #409136 Agenda Key: 52RH

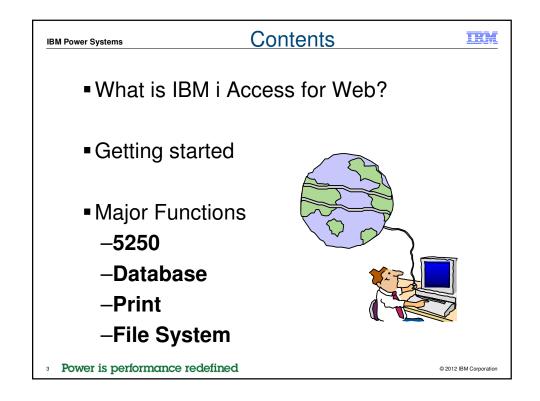
Speaker Name: Wayne Bowers (wbowers@us.ibm.com)

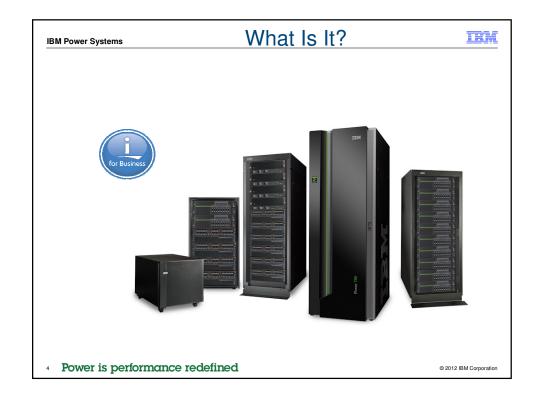


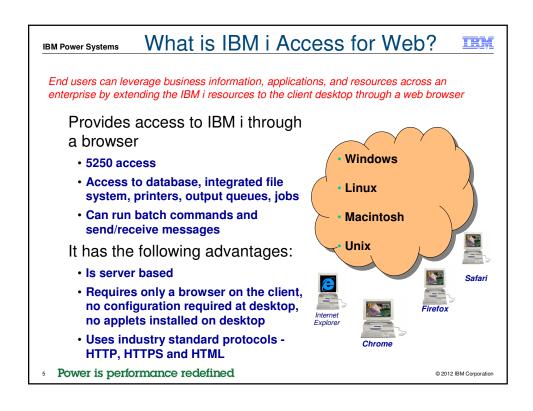
### Power is performance redefined

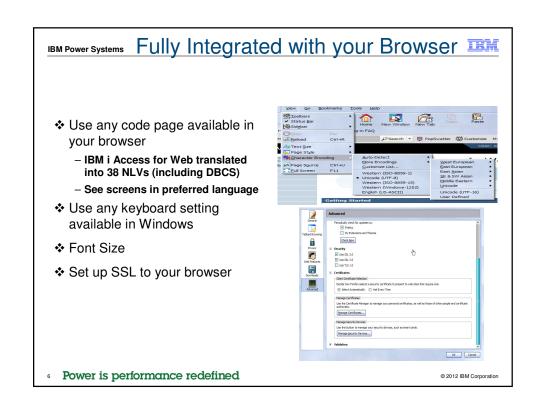
Deliver services faster, with higher quality and superior economics

IBM P	Power System	s	IBM i Access Sessions	IEM
	Tuesda	ay		
•	9:30am	Landmark Ballroom 2	Show and Tell: IBM i Access Client Solutions and Navigator for i	
	5:00pm	Majestic B	Time for a Change: An Overview of the Next Generation of IBM i Access	580083
	Wedne	sday		
	9:30am	Majestic H	Get to the Web Fast with IBM i Access for Web: Including 5250 Browser Access	409136
	11:00am	Majestic H	Deep Dive into the Next Generation of IBM i Access	580084
		-		
2 <b>P</b>	Power is p	erformance	e redefined o	2012 IBM Corporation

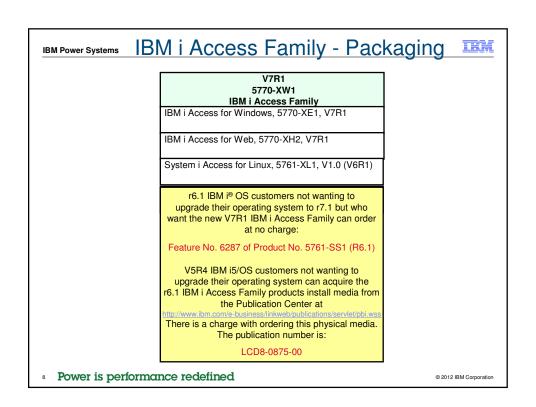












### Products - Focus

TEM

		Product	Need 57xx-XW1
Description	Product		NCCU 57 XX-XVV I
		Number	to use?
Family Name	≻IBM i Access Family	57xx-XW1	
			Yes
Windows client	➤IBM i Access for Windows	57xx-XE1	(for 5250 and Data
			Transfer)
Linux client	>IBM i Access for Linux	57xx-XL1	Yes (for 5250)
Browser Access	>IBM i Access for Web	57xx-XH2	Yes
IBM i systems	➢System i Navigator	Packaged in	No
management	➤ Operations Console	57xx-XE1	140

<sup>\* 57</sup>xx = 5770 or 5761 or 5722

**IBM Power Systems** 

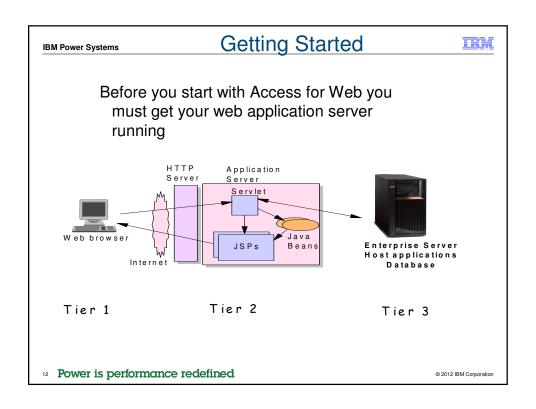
### Flexible Purchase Options:

- O 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
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### Functions with Access for Web TRIV IBM Power Systems Messages Print My Personal Folder Display Messages Printer output ■ PDF Printer output Send Messages Jobs Printers Sametime User Jobs Operator Messages PDF Printers Server Jobs Internet Printers Message Queue Internet Printer Shares Printer shares Customize Database Output Queues Preferences ■ Tables AFP to PDF Conversion Policies My Request Run SQL Settings 5250 - Open Office Formats Transfer configuration data - Wizards supports joins Active Sessions - Chart SQL results Start 5250 Session Other ■ Copy Data to Table Configured Sessions Import Requests ■ Bookmarks Bypass Sign-on System i Access for Windows Query Manager & Query/400 ■ Change Password ■ Connection Pool Files Extract Server Data Status Browse Files ■ Trace File Shares Commands ■ Browse File Share Single sign-on Run commands My commands ■ EIM (WAS authentication) Scheduling of tasks Search • Windows domain login (WAS SPNEGO authentication) 10 Power is performance redefined © 2012 IBM Corporation





# IBM Power Systems Supported Web Application Servers

- The IBM i Access for Web servlet code can be used with any of the following web application servers:
  - IBM i Integrated Web Application Server
  - WebSphere® Application Server V8.5, V8.0, V7.0, and V6.1 – Express for i
  - WebSphere® Application Server V8.5, V8.0, V7.0, and V6.1 – Base and Network Deployment
  - Only supported with Access for Web V6R1
    - WebSphere Application Server V6.0 Express for I
    - WebSphere Application Server V6.0 Base and Network Deployment

- The IBM i Access for Web portlet code can be used with any of the following portal servers.
  - Websphere Portal V6.1
  - Websphere Portal V7.0
  - Websphere Portal V8.0
  - Only supported with Access for Web V6R1
    - Websphere Portal V6.0
    - Websphere Portal V5.1

PTFs required for latest web application server and portal support: http://www.ibm.com/systems/i/software/access/web/servicepacks.html

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# IBM Power Systems Integrated Web application server

- What is the IBM i Integrated Web Application server?
  - A web application engine much like ASF Tomcat
  - Uses fewer system resources, similar to ASF Tomcat
  - Minimal effort by an Administrator to maintain
  - ASF Tomcat no longer included with IBM i
- How is it packaged?
  - 5770-DG1 and 5761-DG1 IBM HTTP Server for i
  - Integrated Web application server 7.1 is available in the V6R1 DG1 group PTF
    - V6R1 SF99115 level 1 or later
- IBM i Access for Web support
  - V5R4 and later System i Access for Web support the IBM i Integrated Web Application server
  - V7R1 IBM i Access for Web can be installed and is supported on IBM i R7.1 and R6.1
  - V6R1 System i Access for Web can be installed and is supported on R6.1 and V5R4 IBM i

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## Get Access for Web running



- Get a copy of the IBM i Access for Web Install & Users Guide
  - http://www.ibm.com/systems/i/software/access/web/doc.html
- Install IBM i Access for Web from your IBM i stacked media.
  - Install Access for Web, 57xx-XH2
- Configure and start IBM i Access for Web.
  - CFGACCWEB2 Configure the IBM i Access for Web to the application server

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# IBM i Integrated Web App Server

### User created instance (requires use of V7R1 or V6R1 Access for Web)

- 1. Load/apply latest HTTP Server PTFs (review cover letters for any additional information)
  - V7R1 SF99368 group for product 5770-DG1
     V6R1 SF99115 group for product 5761-DG1
- Load/apply latest V6R1 Access for Web PTF
   V7R1 Sl38412 GA PTF (Sl48504 current)
   V6R1 Sl29664 or later (Sl47562 current)
- 3. Start the Web Administration for i
  - STRTCPSVR SERVER(\*HTTP) HTTPSVR(\*ADMIN)
- 4. Use the Web Administration for i wizard to create an instance of the integrated Web application server and an HTTP web
  - http://<system\_name>:2001/HTTPAdmir

Follow the instructions in the doc on this page:

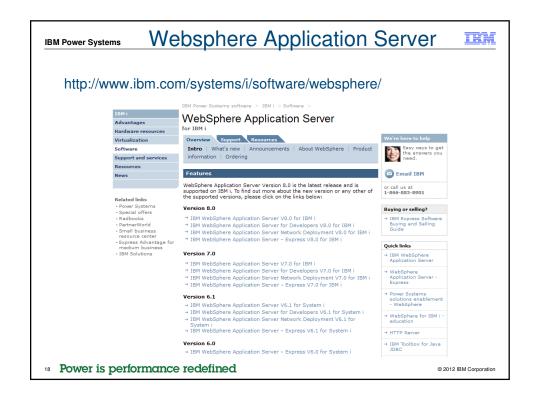
(6.1 Link: "Configuring an Integrated Web Application Server Instance")

- 5. Configure Access for Web

  - OSH
     d /QIBM/ProdData/Access/Web2/install
     cfgaccweb2 -appsvrtype "INTAPPSVR -instance <instance\_name>
  - CL CMD in r7.1 XH2 only: QIWA2/CFGACCWEB2 APPSVRTYPE(\*INTAPPSVR) INSTANCE(<instance name>)
- 6. Start integrated Web application server and HTTP web server using the Web Administration for i interface.
- 7. Open a browser to System i Access for Web using previously configured HTTP port

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## IBM i Integrated Web App Server **IBM Power Systems** Administrative instance and preconfigured HTTP server (use V5R4 or later Access for 1. Stop the Web Administration for i5/OS ENDTCPSVR SERVER(\*HTTP) HTTPSVR(ADMIN) 2. Load/apply latest PTFs (review cover letters for any additional information) V7R1 SF99368 group for product 5770-DG1 V6R1 SF99115 group for product 5761-DG1 V5R4 SF99114 group for product 5722-DG1 3. Load/apply latest Access for Web PTF V7R1 Sl38412 GA PTF or later (Sl48504 current) V6R1 Sl29664 or later (Sl47562 current) V5R4 Sl29607 or later (Sl33310 current) 4. Configure Access for Web OSH od /QIBM/ProdData/Access/Web2/install cfgaccweb2 -appsvrtype "INTAPPSVR" CL CMD in r6.1 and later XH2: QIWA2/CFGACCWEB2 APPSVRTYPE(\*INTAPPSVR) 5. Start the Web Administration for i5/OS STRTCPSVR SERVER(\*HTTP) HTTPSVR(\*ADMIN) Start preconfigured HTTP web server STRTCPSVR SERVER(\*HTTP) HTTPSVR(IWADFT) 7. Open a browser to Access for Web using preconfigured HTTP port Power is performance redefined © 2012 IBM Corporation



# Port Requirements Comparison

# IBM i Access for Windows (57xx-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 446 (448) for DDM
- Port 23 (992) for Telnet
- Port 137, 138 for NetServer

# IBM i Access for Web (57xx-XH2)

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

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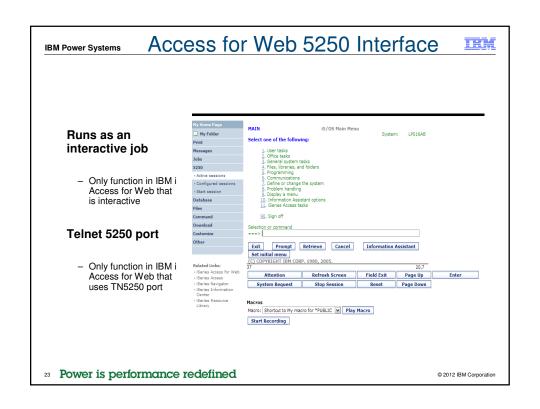
### Access for Web Documentation EM IBM Power Systems http://www.ibm.com/systems/power/software/i/access/web\_resources.html Documentation 7.1 IBM i Access for Web is supported on IBM i 7.1 and 6.1 Connecting to your system: IBM i Access for Web (Information Center) (PDF, 637KB) IBM i Access for Web WebSphere Application Server Single Sign-on Using SPNEGO (PDF, Configuring WebSphere Application Server - Express V8.5 for IBM i (PDF, 132KB) Configuring WebSphere Application Server – Express V8.5 for IBM i with Single sign-on (PDF, Configuring WebSphere Application Server - Express V8.0 for IBM i (PDF, 131KB) Configuring WebSphere Application Server – Express V8.0 for IBM i with Single sign-on (PDF, Configuring IBM WebSphere Portal V8.0 (PDF, 141KB) Configuring IBM WebSphere Portal V7.0 (PDF, 10gKB) Automating Tasks – HTTPS/SSL (PDF, 43KB) Configuring Enterprise Identity Mapping (PDF, 161KB) ■ URL Interfaces to IBM i Access for Web (PDF, 828KB) 6.1 System i Access for Web is supported on IBM i 6.1 and V5R4 i5/OS. Connecting to System i: System i Access for Web (Information Center) (PDF, 578KB) ■ IBM i Access for Web WebSphere Application Server Single Sign-on Using SPNEGO (PDF, Automating Tasks – HTTPS/SSL (PDF, 49KB) Configuring an Integrated Web Application Server Instance (PDF, 144KB) Configuring IBM WebSphere Portal V7.0 (PDF, 103KB) Configuring IBM WebSphere Portal V6.1 (PDF, 94KB) Configuring WebSphere Application Server – Express V7.0 for IBM i (PDF, 123KB) Power is performance redefined

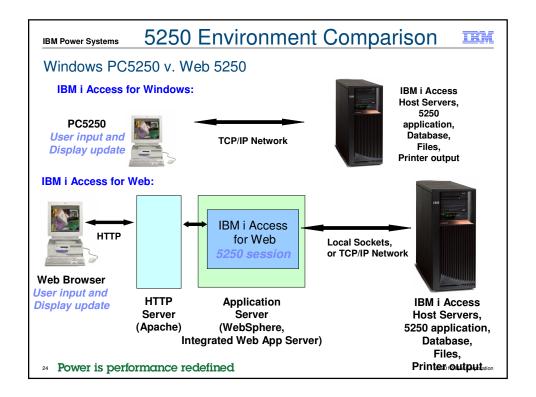
# IBM Power Systems Ways to Roll Out Access for Web

- Use 'out of the box'
  - Set some policies to limit what functions are accessible to your users, and give them the URL address to IBM 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.

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# Things to Consider

IBM

Because 5250 session is implemented using HTML, considerations to be aware of:

- 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 (ie, Field Exit)
- Does not include Printer Emulation (push to printer)
  - IBM i strategy is Internet Printing Protocol (IPP) printing
  - IBM 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
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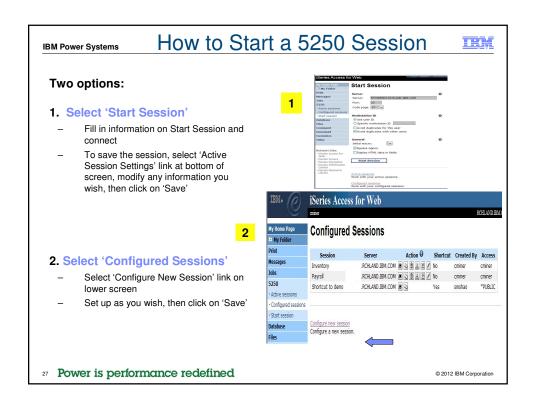


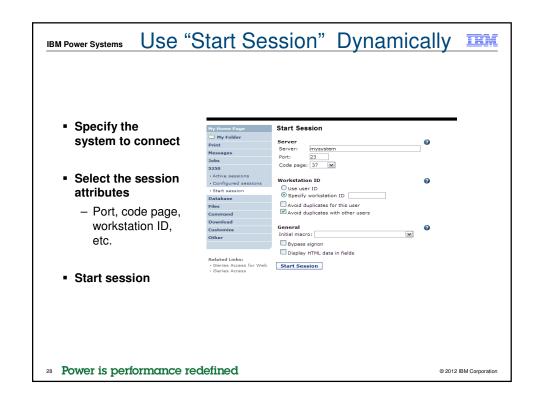


Starting a 5250 session

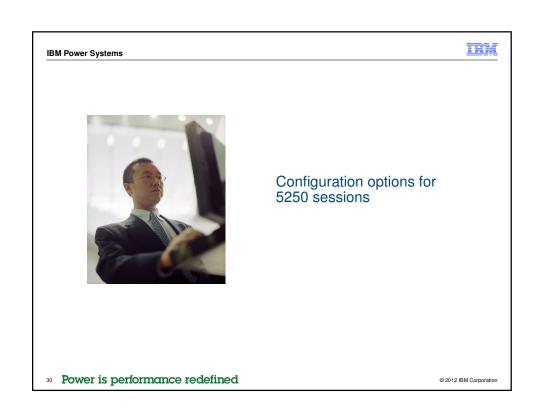
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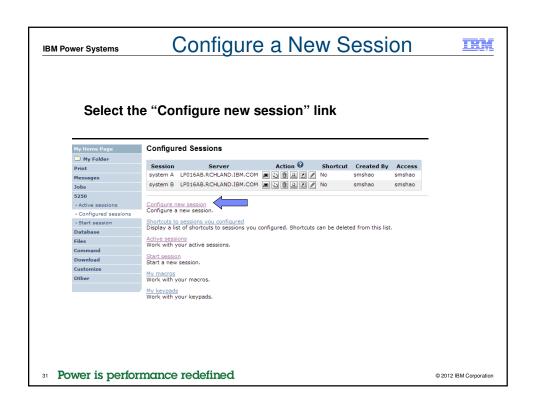
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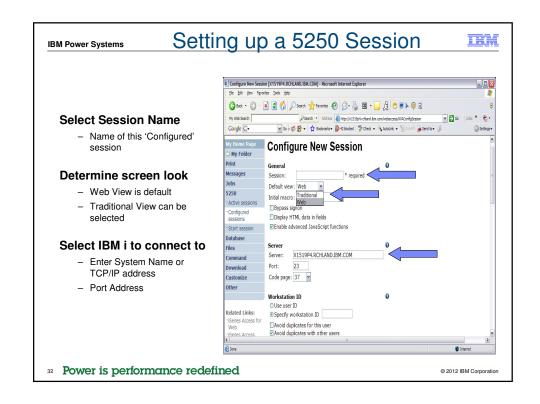


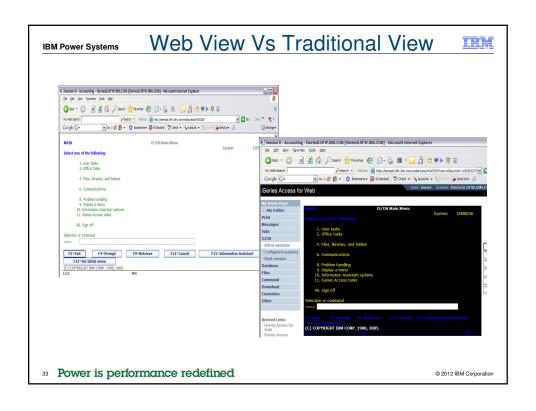


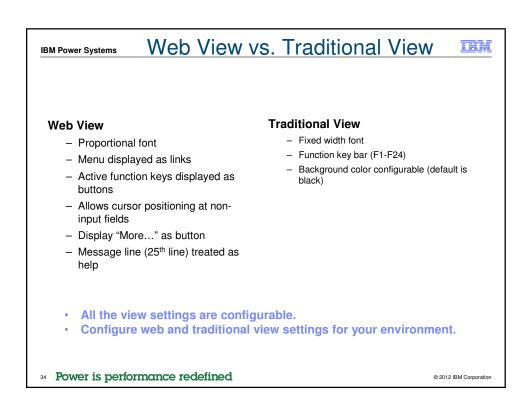


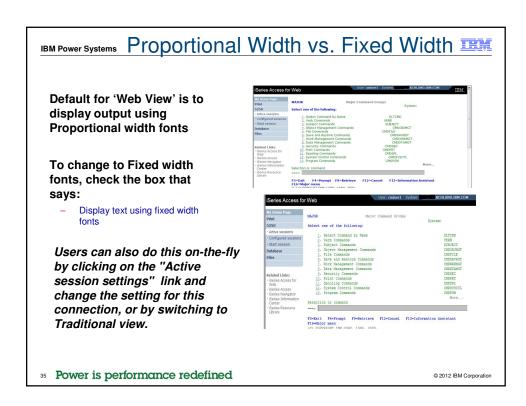


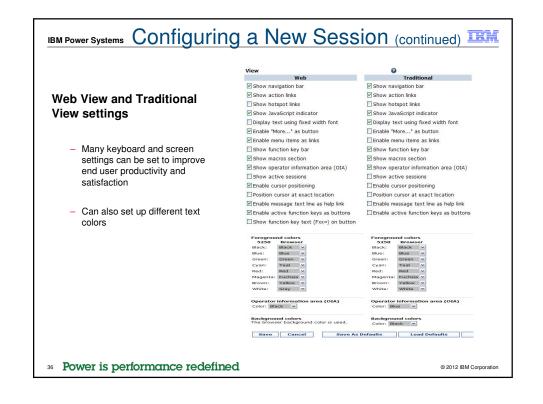




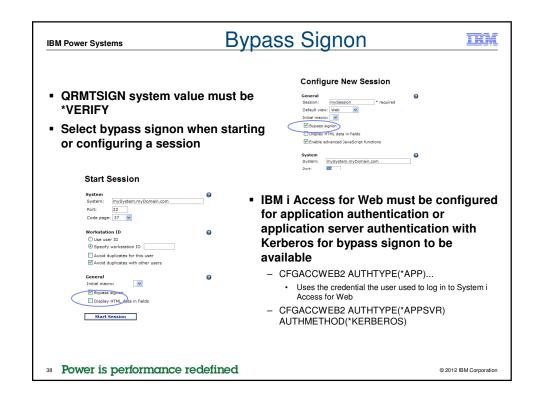






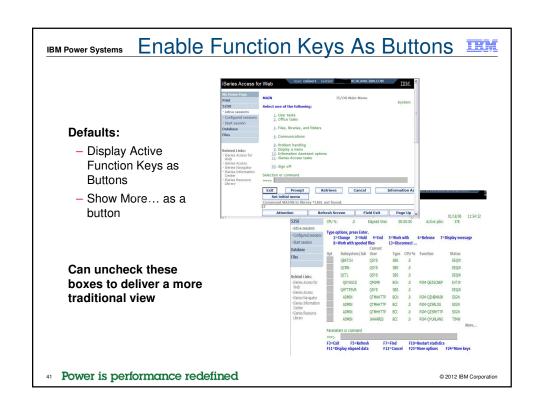


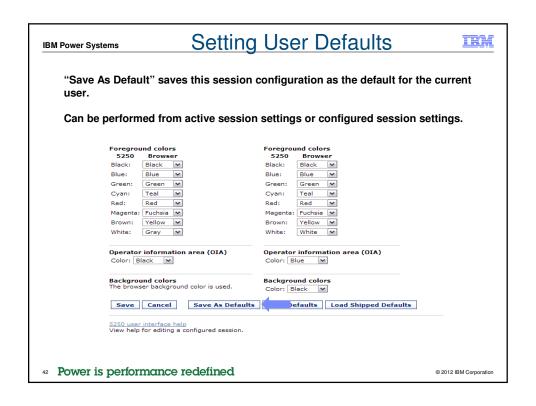
### **Bypass Signon** IBM **IBM Power Systems** Configure New Session Uses the credential the user Initial macro: Bypass signon Display HTML data in fields used to login to **IBM i Access for** Enable advanced JavaScript functions Web Code page: 37 Option available for configured and Avoid duplicates for this user Avoid duplicates with other users dynamically started session 37 Power is performance redefined © 2012 IBM Corporation

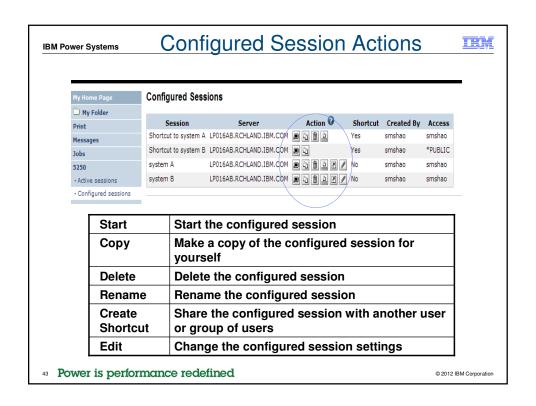


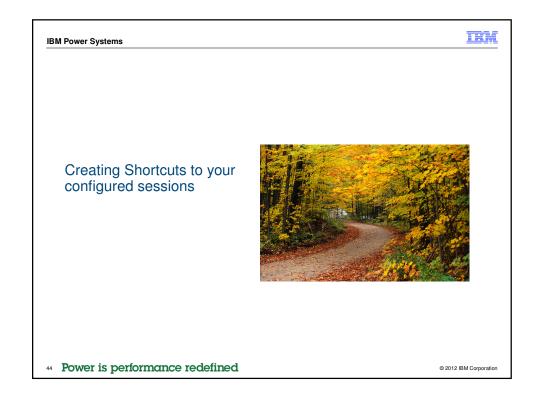
IBM Power Systems Workstation ID	BM
Workstation ID  ○ Use user ID  ② Specify workstation ID  □ Avoid duplicates for this user  ☑ Avoid duplicates with other users	
Use user ID  IBM i Access for Web authenticated user ID is used for the workstation ID, up to ten characters.	
Specify workstation ID  Enter a workstation ID of your choice, up to ten characters.  If you select the radio button and leave the text field blank, a value is generated by IBM i. The default device name starts with QPADEV.	
Avoid duplicates for this user:  When this option is enabled, a wild card character is added to the device name to make it unique for the current user.	
Avoid duplicates with other users:  When this option is enabled, the server adds a wild card character to the device name to make it unique for all users on the server.	
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IBM Power Systems	Fonts	
IBM i Access for V	Web 5250 is rendered with HTML	
- Fonts are contr	olled by the browser	
<ul> <li>Use browser op</li> </ul>	otions to change the font style and font size	
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- Tower is performance	o reachine a	© 2012 IDM Corporation



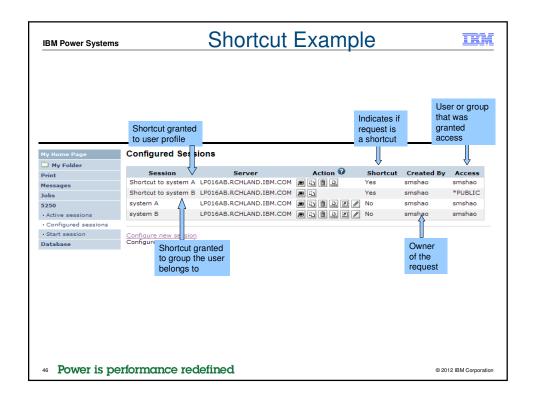


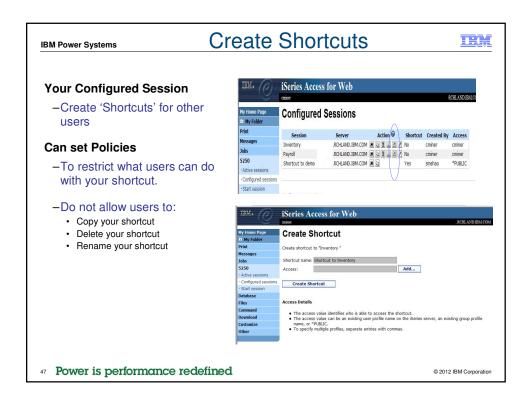


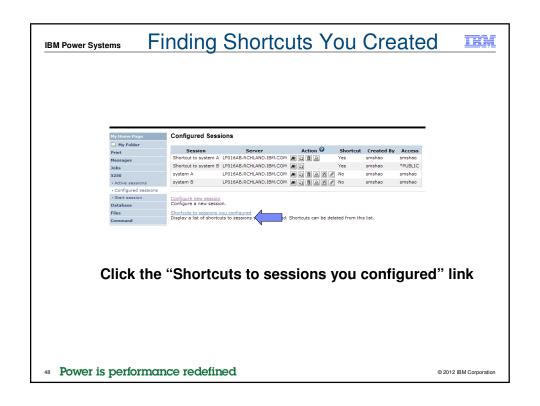


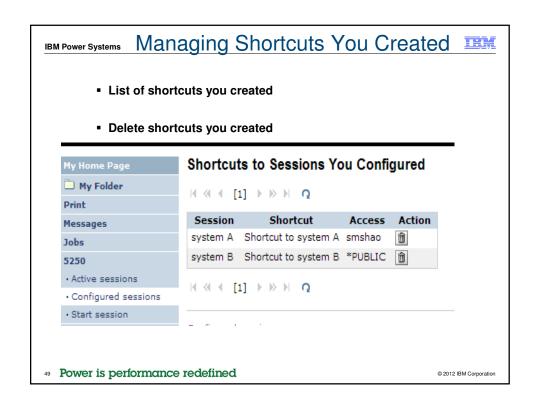
### IBM Power Systems Shortcuts

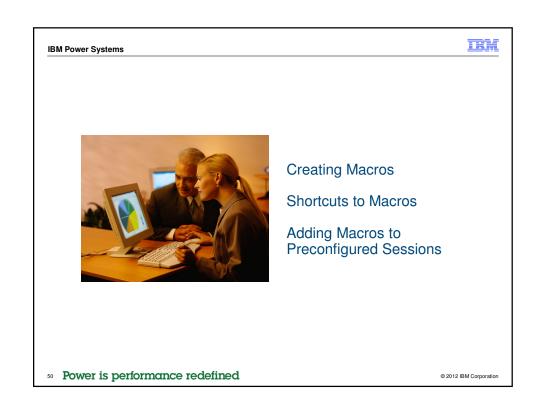
- Shortcut is a pointer to an IBM i Access for Web object
  - Configured 5250 session
  - Database request
  - Shortcuts to an object are deleted when the object is deleted
- The objects is only accessible to the user that created it
- Can share the object with other users
  - Create shortcut for user or group to share with user or group
- User of the shortcut has read-only access to the object
  - Cannot modify or delete the object
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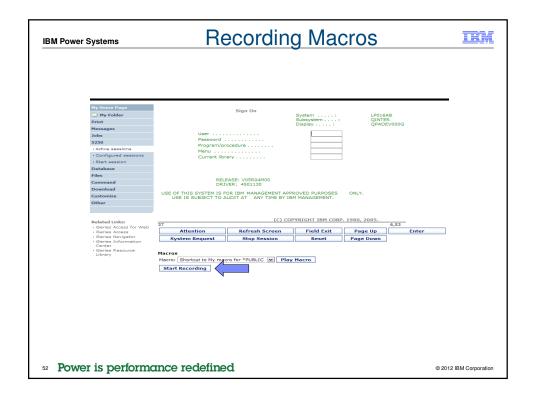


### IBM Power Systems Macros

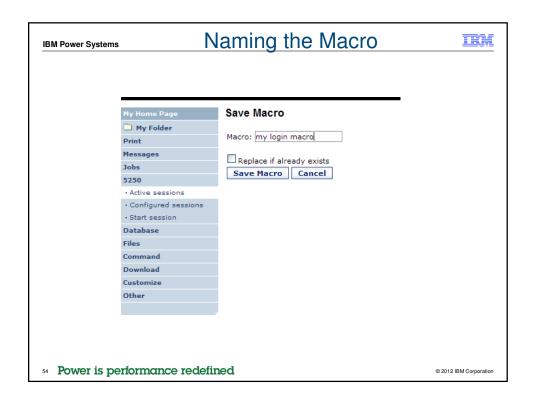
### Behave differently than PC5250

- Keys processed on a screen by screen basis
  - PC5250 every key is recorded and played back
  - IBM i Access for Web cursor positioned in field and keys entered into field
- On a given screen, keys may not be processed in the same order as they are entered
- Functionally equivalent, but behaves differently

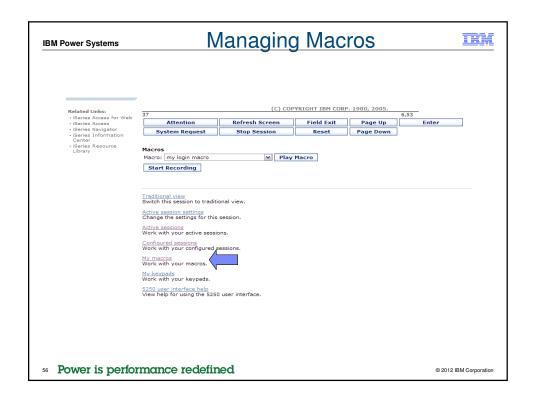
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BM Power Systems	Stop Macro Recording					IBN
My Home Page  Ny Folder  Print  Messages Jobs 3250  Active sessions  - Configured sessions  - Start session  Database Files  Command  Download  Customize  Other	Sign On System: LP016AB Subsystem: QINTER Display: QPADEV000G  Password Program/procedure Menu Current library  RELEASE: VOSR04M00 DRIVER: 450130  USE OF THIS SYSTEM IS POR IBM MANAGEMENT APPROVED PURPOSES ONLY. USE IS SUBJECT TO AUDIT AT ANY TIME BY IBM MANAGEMENT.				_	
Related Links: • iSeries Access for Web	37		DPYRIGHT IBM CORP.		5,53	
iSeries Access     iSeries Navigator	Attention System Request	Refresh Screen Stop Session	Field Exit	Page Up Page Down	Enter	
- iBeries Information Center - iBeries Resource Ubrary	Macros Macro:   Shortcut to My max   Stop Recording   Pau	oro for *PUBLIC   Pla se Recording	у Масго			
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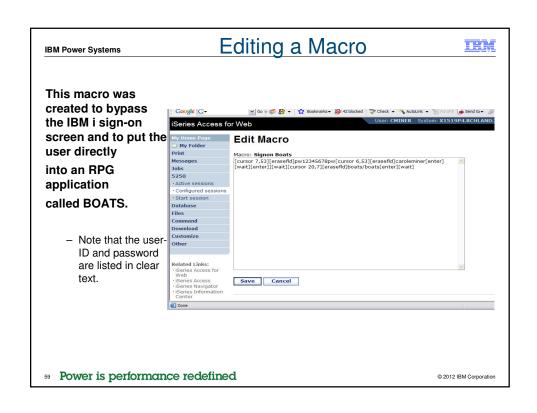


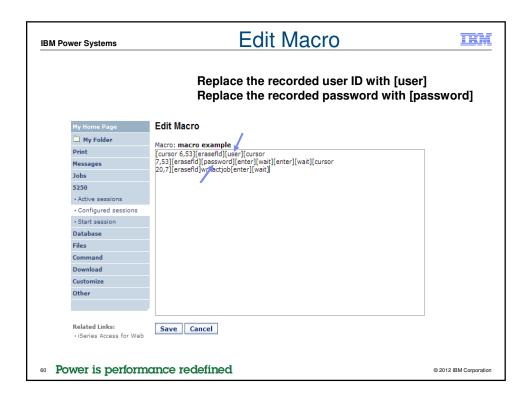
1 Power Systems	Playing Macro				IE	
Hy Home Page  My Folder Print Messages Jobs		Sign On	System :: Subsystem :: Display ::	LP016/ QINTE QPADE		_
• Active sessions • Configured sessions • Start session	Program/pr Menu	ocedure				
Database Files Command Download Customize	DRI' USE OF THIS SYSTEM IS F	EASE: V05R04M00 VER: 4501130 OR IBM MANAGEMENT AP UDJIT AT ANY TIME BY I		ONLY.		
Other Related Links:	37		DPYRIGHT IBM CORP	. 1980, 2005.	6,53	
<ul> <li>iSeries Access for Web</li> <li>iSeries Access</li> </ul>	Attention	Refresh Screen	Field Exit	Page Up	Enter	
<ul> <li>iSeries Navigator</li> <li>iSeries Information</li> </ul>	System Request	Stop Session	Reset	Page Down		
Center • iSeries Resource Library	Macros Macro: my login macro Start Recording	w Pla	y Macro			

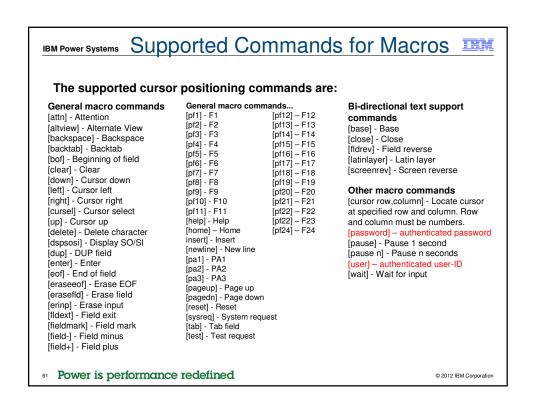


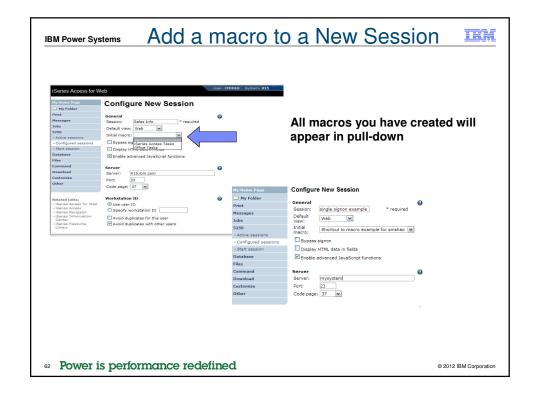


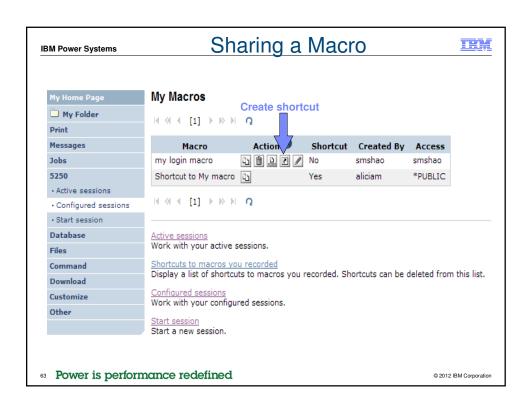
# Single Sign On with Macro Create a macro to login to 5250 Using your own user ID and password Edit the macro and replace your user ID and password with directives to use the user's login Share the macro (create shortcut) with the user or group Associate the macro with a session so the macro is executed when the session starts Share the session (create shortcut) with the user or group

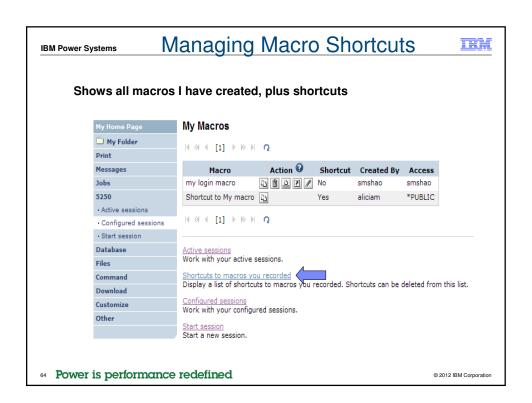


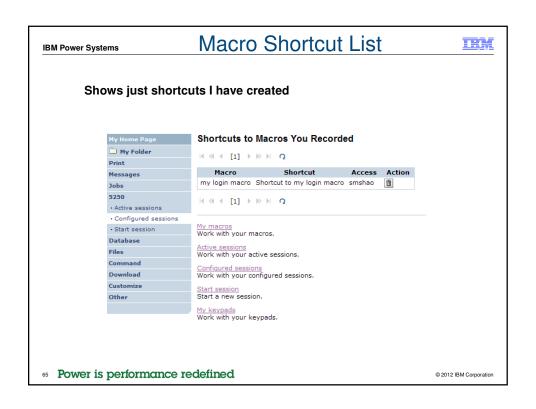


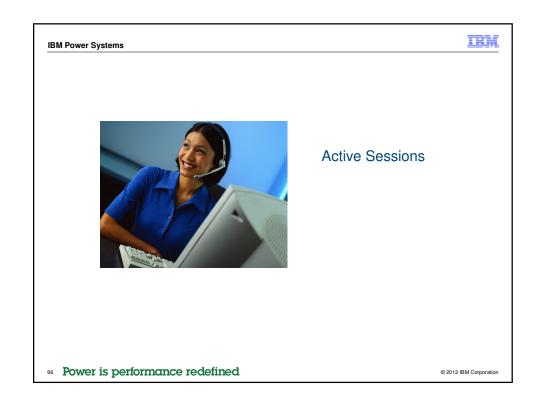


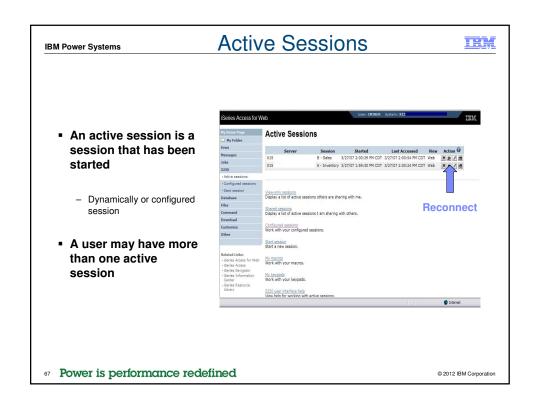


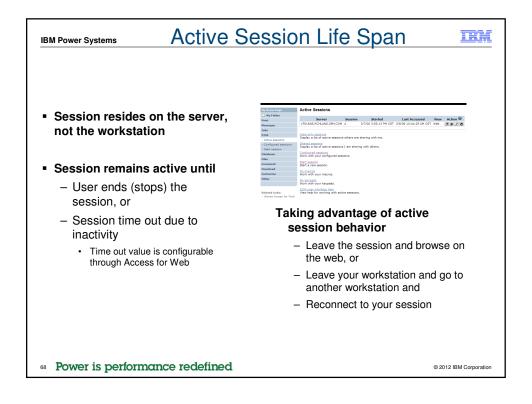










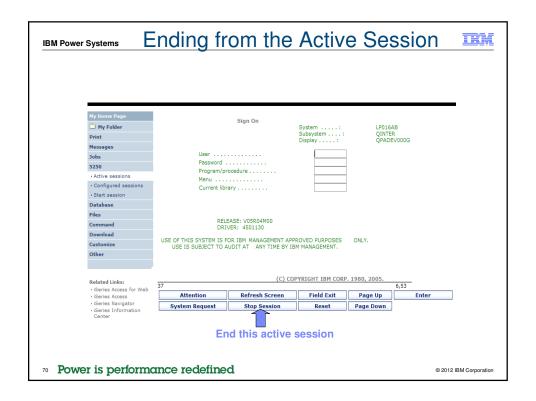


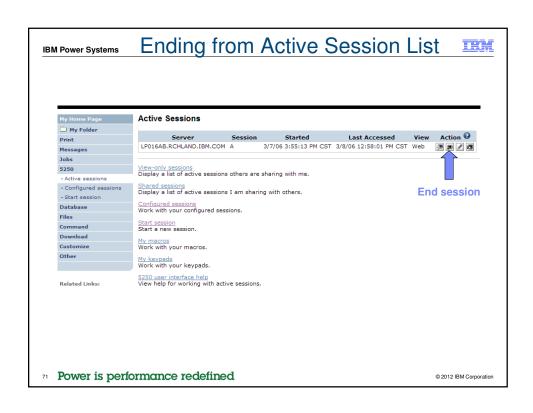
# Ending a Session

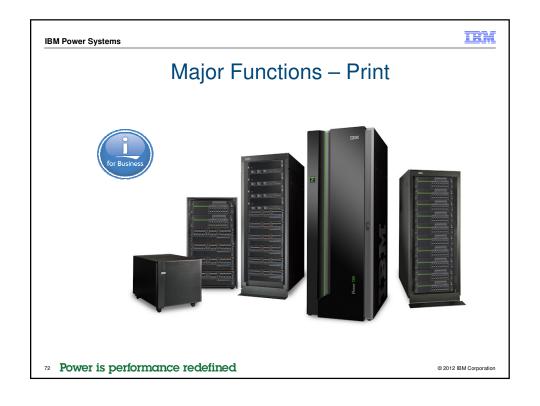
# Closing the browser or turning off the workstation does not end the session

- Two ways to end a session
  - From an active session
  - From active session list
- Properly cleaning up TN5250 connection
  - Frees up resources in application server (Access for Web)
  - Frees up resources on target server (TN5250)
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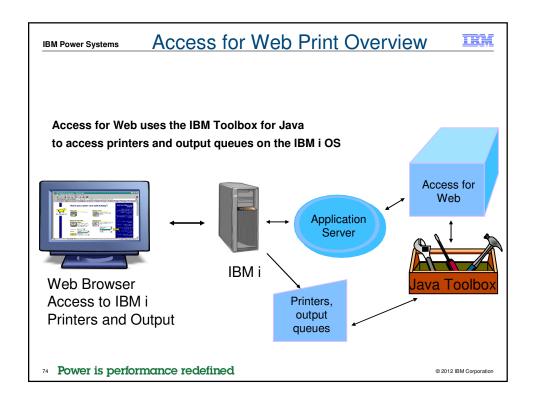


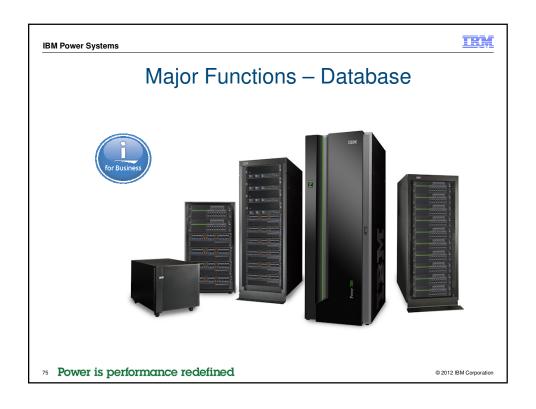


# Access for Web has many end user functions for printing and print management. Access for Web has many end user functions for printing and print management. Print Print Print Printer Printer Printer Printer Printers Printer shares Printer shares Printer shares - view and manage internet printers Printer shares Printer shares - view printers and manage output Output queues - view and manage queues and output

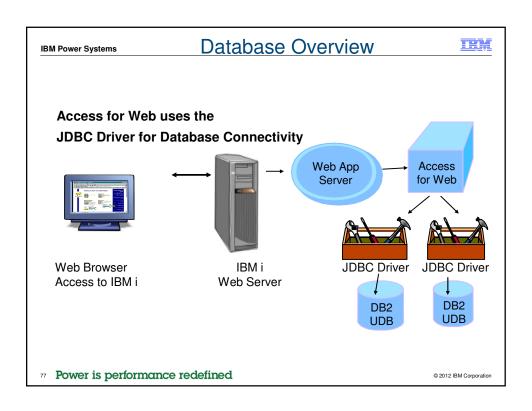
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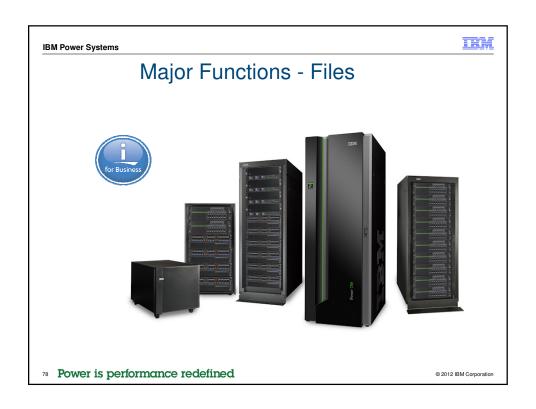
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# Access database tables with System i Access for Web. Functions Access database tables with System i Access for Web. Films 1 View a list of database tables on your target system. 1 View a list of database tables on your target system. 2 View a list of database tables on your target system. 2 View a list of database tables on your target system. 2 View a list of database table on your target system. 3 Add and update records in a table using the flunder and Update control. 4 Create your one customized 6 SQL request for a table using the flunder of table. 5 Create your one customized 6 SQL request for a table using the flunder of table. 6 Create your one customized 6 SQL request for a table using the flunder of table. 7 Create your one customized 6 SQL request for a table using the flunder of table cases. 8 View a list of proviously award requests for a table using the Cloy data to table access. 8 View a list of proviously award request for a table using the Cloy data to table access for a table using the Cloy data to table access. 9 View a list of proviously award requests. 1 View a list of proviously award requests for a table using the Cloy data to table access for a table using the Cloy data to table access for View copy data and SQL requests. 1 View and put an a paged list or in a popular file format, like Microsoft browner configured and whether the browner can locate a play-in for browner configured and whether the browner can locate a play-in for the output type, us though the control of the country type, us though the country type. 3 View and the converted requests just like other copy data and SQL requests. 4 View browners. 5 View requests for repeated live. 5 View requests for repeated live. 6 View browners. 6 View browners. 6 View browners. 7 View browners. 8 View browners. 8 View browners. 8 View browners. 8 View browners. 9 View browners. 9 View browners. 1 View





# 

- 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
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# Summary What is IBM i Access for Web? Getting started Major Functions 5250 Print Database File System Power is performance redefined Summary Power is performance redefined

# Start your browser and connect to the following web site: http://iseriesd.dfw.ibm.com/webaccess/iWAHome (case sensitive) 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, and collection of the printer output, creating database requests, and collection of the printer output, creating database requests, and collection of the printer output, creating database requests, and collection of the printer output, creating database requests, and collection of the printer output, creating database requests, and collection of the printer output, creating database requests, and collection of the printer output.

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 IBM i, then start an RPG application called BOATS and run it.

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 spoolfile information, work with IFS, run database requests, etc..

Send email to: stymie@us.ibm.com to reset the user profiles on iseriesd.dfw.ibm.com if either one gets disabled.

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M Power System	ıs	IBM i Access Sessions		
Tuesda	ay			
9:30am	Landmark Ballroom 2	Show and Tell: IBM i Access Client Solutions and Navigator for i		
5:00pm	Majestic B	Time for a Change: An Overview of the Next Generation of IBM i Access	580083	
Wedne	esday		•	
9:30am	Majestic H	Get to the Web Fast with IBM i Access for Web: Including 5250 Browser Access	409136	
11:00am	Majestic H	Deep Dive into the Next Generation of IBM i Access	580084	

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Revised December 2, 2010

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