



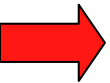
## **Get to the Web Fast with iSeries Access for Web**

*OMNI Day of Education - November 13, 2007*

**Linda Hirsch**    **[LLHIRSCH@us.ibm.com](mailto:LLHIRSCH@us.ibm.com)**

**<http://www.ibm.com/systems/i/software/access>**

# iSeries Access Sessions Today

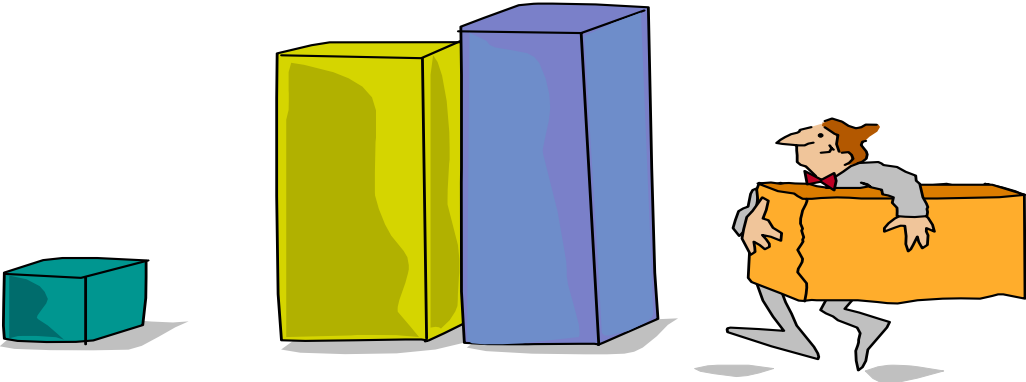


- **Overview: Get to the Web Fast With iSeries Access for Web**
- iSeries Access for Web: Controlling Access and Other Administrator Considerations

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

And click on link “**[Request for Design Change](#)**”

# Packaging and Ordering

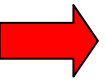


# iSeries Access Family - Packaging

<b>V5R4 5722-XW1 iSeries Access Family</b>	<b>V5R3 5722-XW1 iSeries Access Family</b>
iSeries Access for Windows, 5722-XE1, V5R4	iSeries Access for Windows, 5722-XE1, V5R3
iSeries Access for Web, 5722-XH2, V5R4	iSeries Access for Web, 5722-XH2, V5R3
	HATS Limited Edition V5.0, 5724-F97-01 (withdrawn 1Q2006)
iSeries Access for Linux, 5722-XL1	iSeries Access for Linux, 5722-XL1, V1.10
iSeries Access for Wireless, 5722-XP1, V5R4	iSeries Access for Wireless, 5722-XP1, V5R3
	V5R3 customers not wanting to upgrade to i5/OS V5R4 but want the new V5R4 iSeries Access Family clients can order no-charge <b>Feature No. 2648 of Product No. 5722-XW1</b>

# Products - Focus

Description	Product	Product Number	Need 5722-XW1 to use
Family Name	➤ iSeries Access Family	5722-XW1	
Windows client	➤ iSeries Access for Windows	5722-XE1	Yes (for 5250 and Data Transfer)
Linux client	➤ iSeries Access for Linux	5722-XL1	Yes (for 5250)
Browser Access	➤ iSeries Access for Web	5722-XH2	Yes
Handheld / Wireless offering	➤ iSeries Access for Wireless ➤ iSeries Toolbox for Java ME	5722-XP1	No
i5/OS systems management	➤ iSeries Navigator ➤ Operations Console ➤ EZ-Setup	Packaged in 5722-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 OS/400 software subscription

# iSeries Access Family included with new System i Hardware

- iSeries Access Family (5722-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

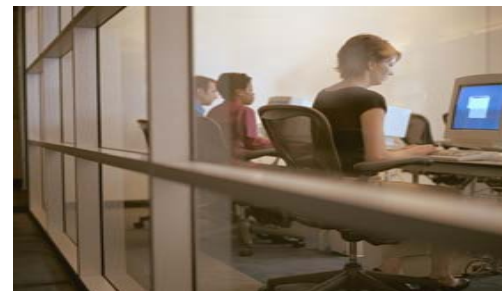
- See Announcement Letter 107-182 dated 4/1/07 for more details

- System i Model 570 with POWER6 technology

- See Announcement Letter 107-448 dated 7/31/07 for more details

- Any i5/OS user connecting to the above System i models is entitled to use any of the iSeries Access Family products at no additional charge. This includes:

- iSeries Access for Windows
  - iSeries Access for Web
  - iSeries Access for Linux



# Table of Contents

- **What is iSeries Access for Web?**
- **Functional Overview and Controlling Access**
- **Installation and Configuration**



# What is iSeries Access for Web?

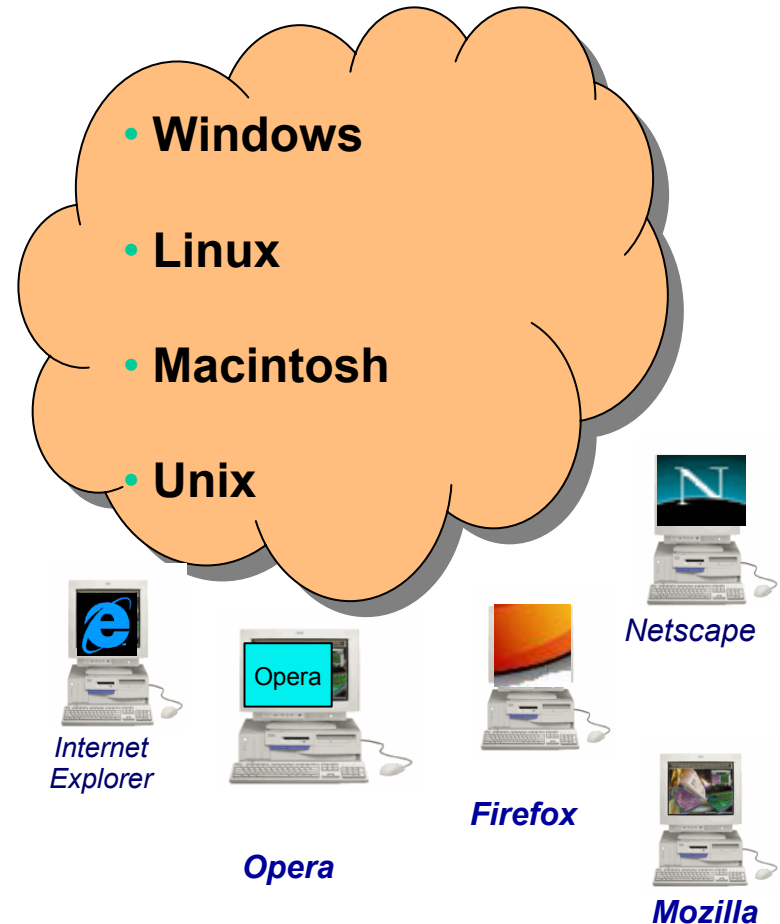
*End users can leverage business information, applications, and resources across an enterprise by extending the iSeries resources to the client desktop through a web browser*

## 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:

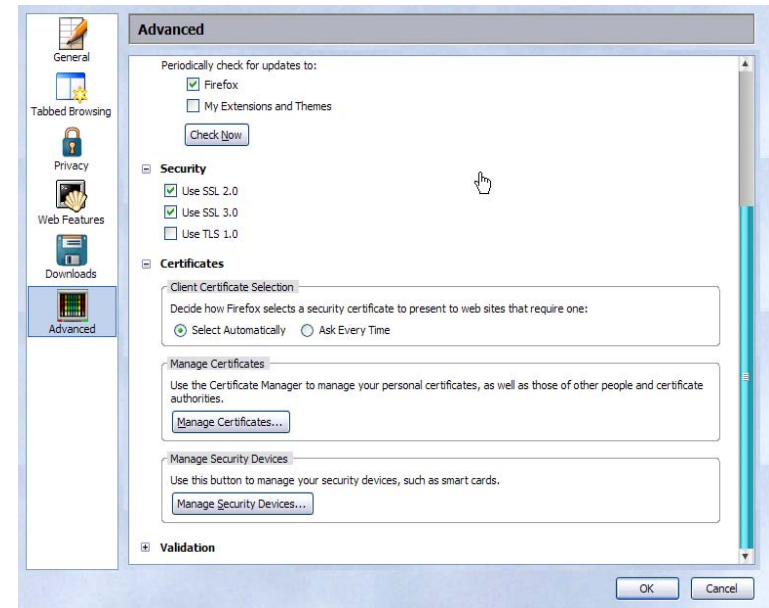
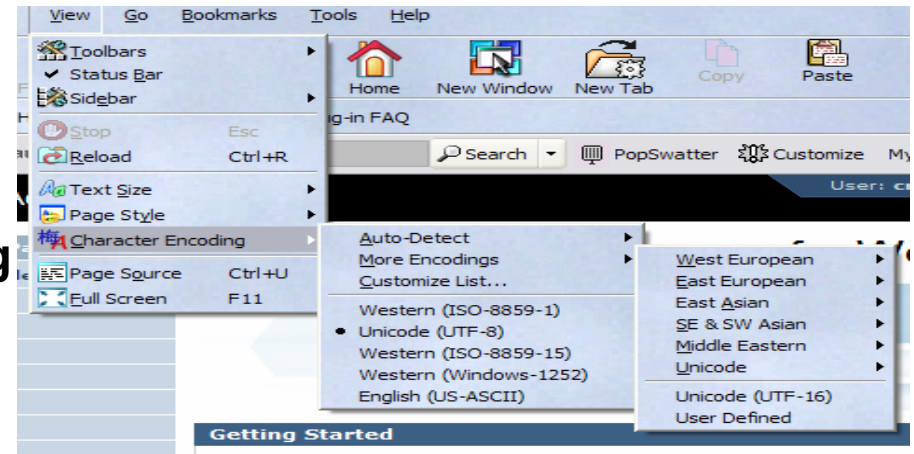
- **Is server based**
- **Requires only a browser on the client, no configuration required at desktop, no applets installed on desktop**
- **Uses industry standard protocols - HTTP, HTTPS and HTML**





# Fully Integrated with your Browser

- ❖ Use any code page available in your browser
  - iSeries Access for Web, V5R4, translated into 38 NLVs (including DBCS)
    - New Japanese Feature 2930 in V5R4
  - See screens in preferred language
- ❖ Use any keyboard setting available in Windows
- ❖ Font Size
- ❖ Set up your SSL through your browser



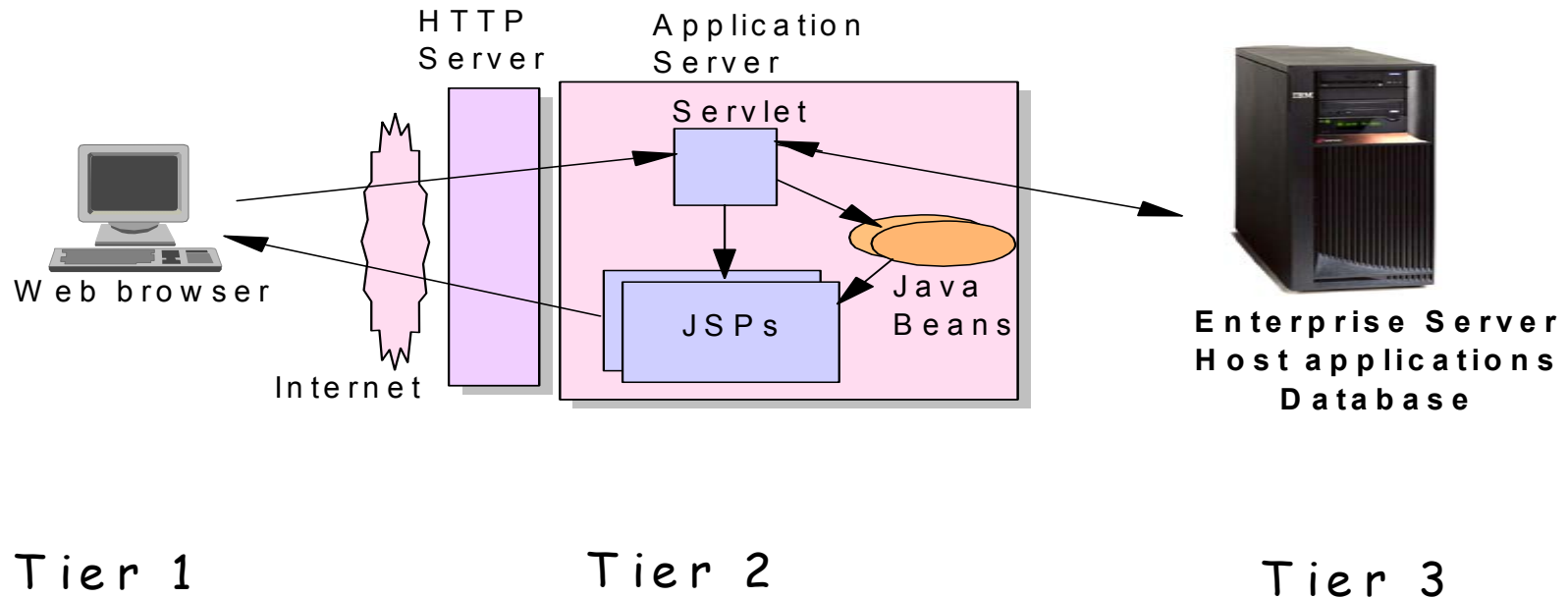
# Functions you can perform with iSeries Access for Web 5722-XH2, V5R4

- 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
  - **\*\* Browse File Shares**
  - File Shares
- Messages**
  - Display Messages
  - Send Messages
  - Sametime
  - Operator Messages
  - Message Queue
- Database**
  - Tables
  - My Request
  - Run SQL
    - **\*\* Open Office Formats**
  - Copy Data to Table
  - Import Requests
    - iSeries Access for Windows
    - **\*\* Query Manager**
    - **\*\* Query/400**
  - Extract Server Data
- Download**
- My Personal Folder**
- Jobs**
  - User Jobs
  - Server Jobs
- Customize**
  - Preferences
  - Policies
  - Settings
  - **\*\* Transfer configuration**
- Commands**
  - Run commands
  - My commands
  - Search
- Other**
  - Bookmarks, Change Password, Connection Pool, Status, Trace, About

Items marked with \*\* are new  
in the V5R4 version

# Getting Started

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



# Supported Web Application Servers

- The iSeries Access for Web servlet code can be used with any of the following web application servers:
- The iSeries Access for Web portlet code can be used with any of the following portal servers.

## 1. Integrated web application server – announced 4Q2006

### 2. WebSphere® Application Server (WAS):

- WAS V6.1 and V6.0 – Express for i5/OS
- WAS V6.1 and 6.0 Base and Network Deployment
- WAS V5.1 - Express for iSeries
- WAS V5.0 - Express
- WAS V5.1 and 5.0 Base and Network Deployment Editions

### 3. ASF Tomcat

- IBM Workplace Services Express V2.6 (V5R4 iSeries Access for Web)
- IBM Workplace Services Express V2.5
- 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:**

**<http://www.ibm.com/systems/i/software/access/web/servicepacks.html>**

## **4Q2006 Announcement: “System i Web Enablement Made Easy”**

- **Two pieces related to iSeries Access for Web:**
  - **iSeries Access for Web supports the use of a Web application server integrated with i5/OS.**
    - **Configure iSeries Access for Web without having to install or configure a Web Application server**
  - **Web Enablement for i5/OS: Express Runtime Environment**
    - **Auto configure of Web servers, components, applications using WAS – Express V6.0**
    - **iSeries Access for Web is part of the environment**

PTFs available:

- iSeries Access for Web PTF SI25122 or later
- HTTP Server PTFs available; Group PTF SI99114 (Level 6) or later

**<http://www.ibm.com/systems/i/software/access/web/servicepacks.html>**

# 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**

**S30 / #2257**

**S20 / #2170,#2165**

**170 / #2176,#2183,#2383,#2384,#2385,#2386**

**270 / #2250,#2431**

**53S / #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...

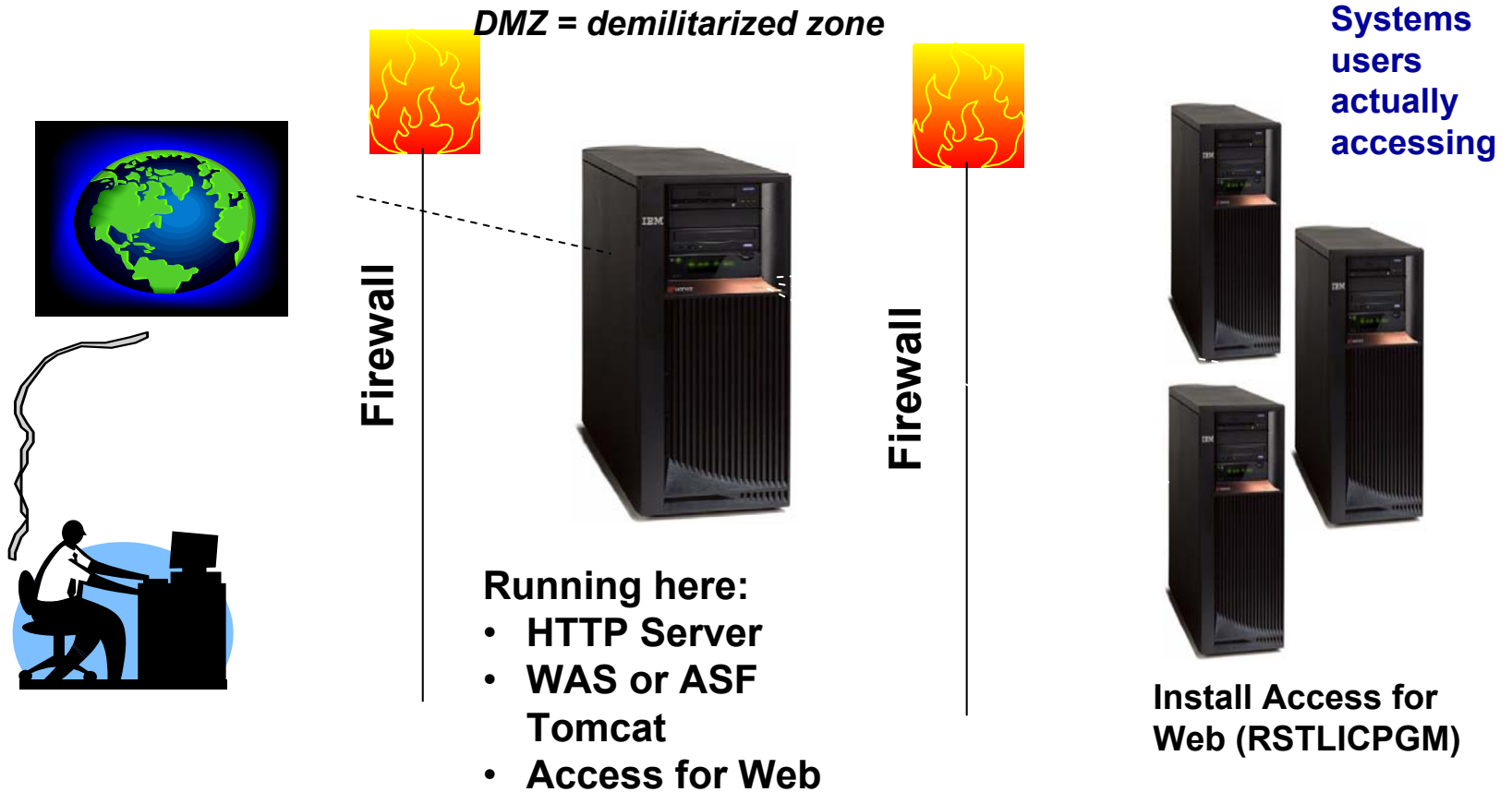
Use the **IBM Systems Workload Estimator** at  
<http://www-912.ibm.com/wle/EstimatorServlet>

The screenshot shows the IBM eServer Workload Estimator web application. The page title is "IBM eServer Workload Estimator" with a version of 2005.4.fxc.1 dated 14-Dec-05. The interface is divided into a left sidebar with navigation links, a top navigation bar with tabs for "Workload Selection", "Workload Definition", "Selected System", and "Help/Tutorials", and a main content area. The "Selected System" tab is active, showing two columns: "Immediate Solution" and "Growth Solution". Each column features a bar chart comparing "Available" capacity (green) and "HATS #1" (blue). The Immediate Solution chart shows 93.5% available and 6.5% HATS #1. The Growth Solution chart shows 90.2% available and 9.8% HATS #1. Below the charts are text boxes: "The 520-8950/7450 can handle the defined workloads NOW." and "It can also handle the specified growth." At the bottom, a table summarizes the system configuration for both solutions.

Model/Feature:	520-8950/7450	500/30
Number of Systems:	1	
Processor CPW:	500	
5250 OLTP CPW:	30 (24% utilized)	

Model/Feature:	520-8950/7450	500/30
Number of Systems:	1	
Processor CPW:	500	
5250 OLTP CPW:	30 (35% utilized)	

# Setting up your web application server



***Only need to set up one web application server***



# Port Requirements Comparison

## iSeries 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

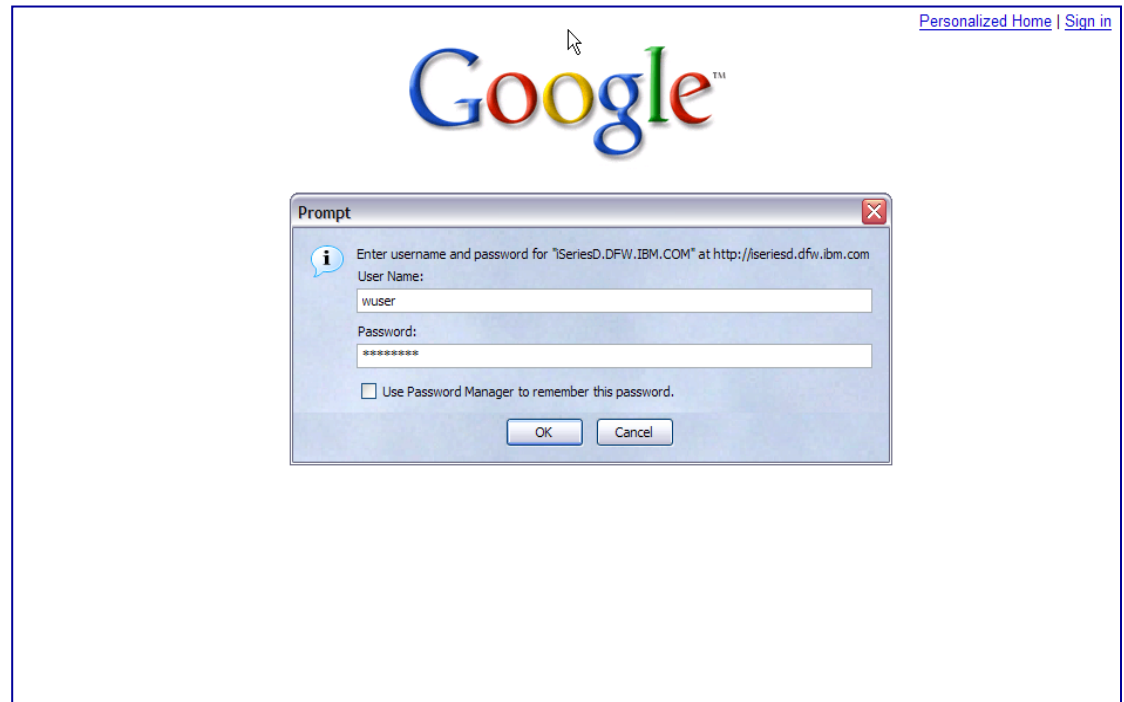
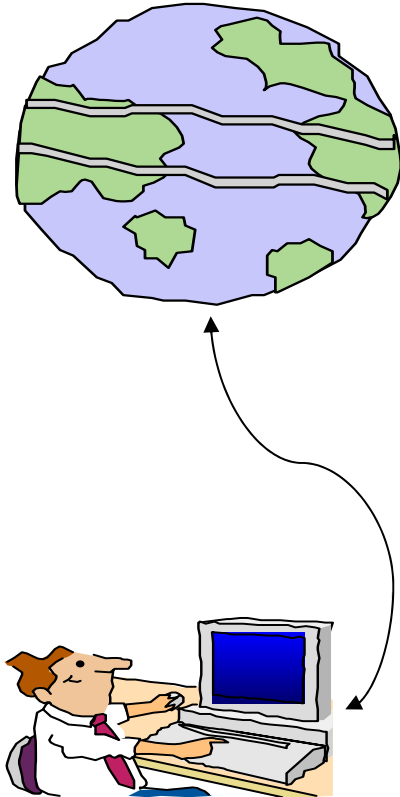
## iSeries Access for Web (5722-XH2)

- 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**

# Users can now Connect!

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



# Functional Overview and Controlling Access

# Different Ways to Roll Out iSeries Access for Web



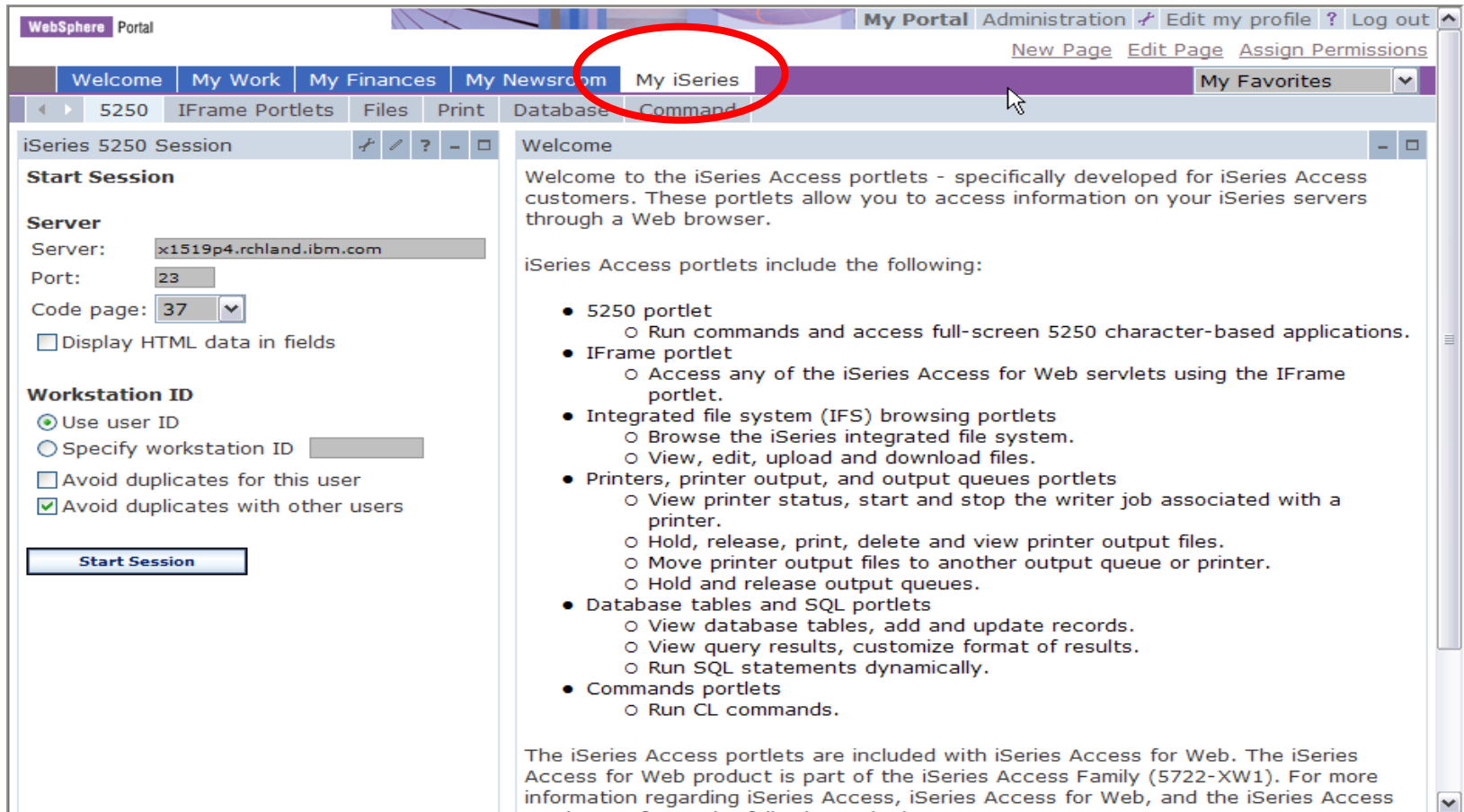
- **Use ‘out of the box’**
  - Set some policies to limit what functions are accessible to your users, and give them the URL address to iSeries Access for Web
- **Use ‘out of the box’, but set up predefined functions**
  - You can set up preconfigured 5250 sessions that users (or groups of users) can 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 Rollout iSeries 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**



# iSeries Access for Web Portlets on iSeries Portal



The screenshot displays the iSeries Portal interface. At the top, there is a navigation bar with tabs for 'Welcome', 'My Work', 'My Finances', 'My Newsroom', and 'My iSeries'. The 'My iSeries' tab is highlighted and circled in red. Below the navigation bar, there is a 'Start Session' section with fields for 'Server' (x1519p4.rchland.ibm.com), 'Port' (23), and 'Code page' (37). There are also checkboxes for 'Display HTML data in fields' and 'Avoid duplicates for this user'. The 'Workstation ID' section has radio buttons for 'Use user ID' and 'Specify workstation ID', and checkboxes for 'Avoid duplicates for this user' and 'Avoid duplicates with other users'. A 'Start Session' button is located at the bottom of this section. The main content area displays a 'Welcome' message and a list of iSeries Access portlets:

- 5250 portlet
  - Run commands and access full-screen 5250 character-based applications.
- IFrame portlet
  - Access any of the iSeries Access for Web servlets using the IFrame portlet.
- Integrated file system (IFS) browsing portlets
  - Browse the iSeries integrated file system.
  - View, edit, upload and download files.
- Printers, printer output, and output queues portlets
  - View printer status, start and stop the writer job associated with a printer.
  - Hold, release, print, delete and view printer output files.
  - Move printer output files to another output queue or printer.
  - Hold and release output queues.
- Database tables and SQL portlets
  - View database tables, add and update records.
  - View query results, customize format of results.
  - Run SQL statements dynamically.
- Commands portlets
  - Run CL commands.

The iSeries Access portlets are included with iSeries Access for Web. The iSeries Access for Web product is part of the iSeries Access Family (5722-XW1). For more information regarding iSeries Access, iSeries Access for Web, and the iSeries Access

# Portlet Support added to iSeries Access for Web

V5R4	V5R3 PTF SI11914 (May 2004)	V5R3 (Jan 2004)
<ul style="list-style-type: none"> <li>• <b>Single Sign-on (SSO)</b> <ul style="list-style-type: none"> <li>– Via WAS Security model</li> <li>– 5250 Bypass signon option</li> </ul> </li> <li>• <b>Database</b> <ul style="list-style-type: none"> <li>– OpenOffice spreadsheet format (.ods)</li> <li>– iSeries SQL Requests</li> <li>– Viewer to look at iSeries SQL results</li> </ul> </li> <li>• <b>Files</b> <ul style="list-style-type: none"> <li>– Zip function to zip files in IFS</li> </ul> </li> <li>• <b>iSeries Credentials</b> <ul style="list-style-type: none"> <li>– Users can change i5/OS password via iSeries Access for Web, and it will additionally update currently defined credentials with the new password value.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>File</b></li> <li>• <b>Print</b></li> <li>• <b>Database</b></li> <li>• <b>Command</b></li> <li>• <b>Credentials</b></li> <li>• <b>Related Links</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>5250</b></li> <li>• <b>iFrame</b></li> <li>• <b>Welcome</b></li> </ul>

# Different Ways to Roll Out iSeries 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 iSeries Access for Web**
- Use the WebSphere Portal solution





# Home Page entry point

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

- **iSeries Access for Web 'Home Page' out-of-the-box view**
- **This page is totally customizable**

The screenshot shows the iSeries Access for Web interface. At the top, it says 'iSeries Access for Web' and 'User: CM1NER System: LP120AB.RCHLAND.IBM.COM'. The main heading is 'Welcome to iSeries Access for Web'. Below this is a decorative graphic of hexagons. The 'Getting Started' section is divided into three columns: 'My Information' (with links like 'My Folder', 'Printer output', 'Display messages', 'Start a 5250 session', 'Database requests', 'Browse files', 'Preferences'), 'My View' (with text about customizing the interface), and 'Related Products' (with links to 'WebSphere Application Server for iSeries', 'WebSphere Development Studio Client for iSeries', and 'WebSphere Development Studio for iSeries'). The right sidebar has sections for 'Rochester information', 'Rochester weather', 'Rochester news', and 'Telephone directory'. The left sidebar lists various navigation options.

***New 'look' in V5R4...***

# Your **Window** to your System i

<http://<myseries>/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...

The screenshot shows a web browser window with the address bar displaying `http://iseriesd.dfw.ibm.com/webaccess/iWAHome`. The browser's address bar also shows a search box and several utility icons like Smiley Central, Screensavers, Cursor Mania, PopSwatter, Games, and My Info. The main content area features a blue header with the IBM logo and the text "Access for Water" with the tagline "Supplying quality boats since 2002". Below the header, there are three main sections: "Services" with links for boat details, available boats, and ordering; "This Week's Special" featuring a white boat and a text description of a 28-foot 1978 Carver Santa Cruz; and "Site Support" with a message about user comments and a link to "BOATHELP". There is also a "Weather Conditions" section with a map of the United States showing weather forecasts for various cities. The browser's status bar at the bottom shows "Done" and "Internet".

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

# Using 5250 emulator in iSeries 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)

Address http://seriesd.dfw.ibm.com/webaccess/WA5250?sessname=boat&initmac=startboat

mywebsearch  Search

**Access for Water** *Supplying quality boats since 2002.*

[Home](#)

AS/400 WSG Boat Demo 8/24/04 15:22:18

Enter your search parameters

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

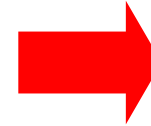
Length (feet)

Year built  year to start from

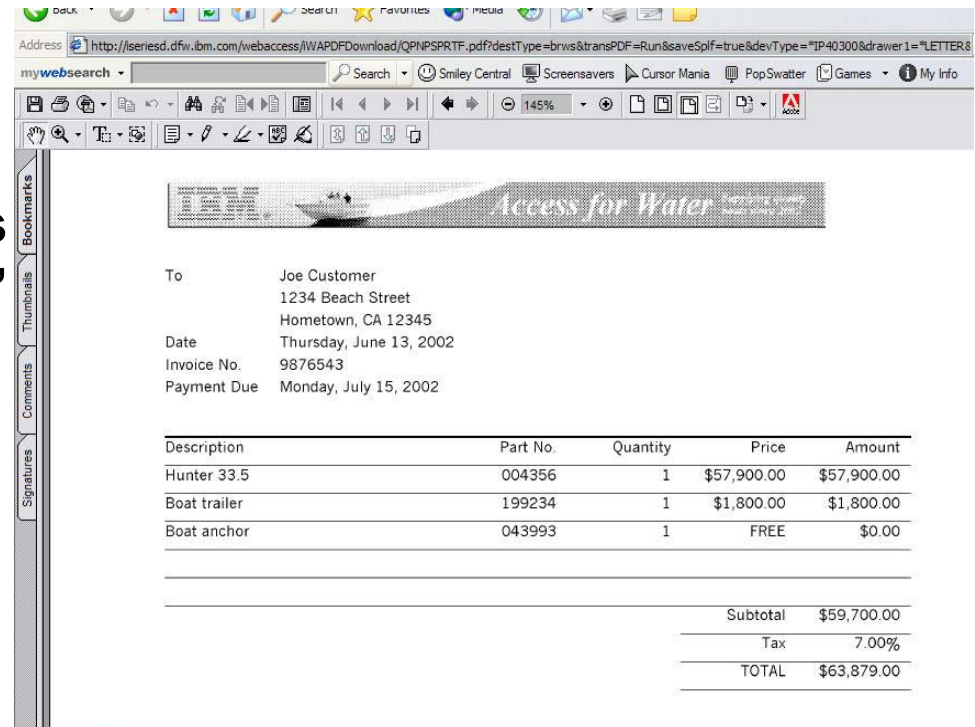
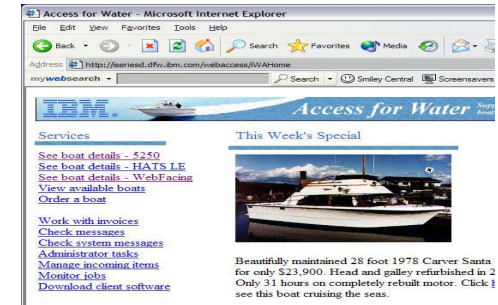
**Zero (0) extra steps**

# 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



# Try out iSeries 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)

<p><b>User ID = WACUST</b></p> <p><b>Password = demo2pwd</b></p>	<p>This shows the basic look of iSeries 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.</p>
<p><b>User ID = BOATADMIN</b></p> <p><b>Password = demo2pwd</b></p>	<p>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..</p>

Send email to: [LLHIRSCH@us.ibm.com](mailto: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 iSeries Access Family web page at: [www.ibm.com/systems/i/software/access/web](http://www.ibm.com/systems/i/software/access/web)

- Click on the "Articles" link on the left-hand 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 will benefit? iSeries managers and desktop administrators who want to Web-enable their iSeries applications.
- What you'll learn: Web's step-by-step guide details how shops can use iSeries Access for Web to provide browser-based access to iSeries applications and data. Because iSeries Access for Web is implemented as a set of Java applets that run on the iSeries server, only a browser is required on the client.
- Bottom line: If your iSeries server is part of your company's intranet, you can use iSeries Access for Web to provide access to your resources for others within your company. If your iSeries server is part of the Internet, you can use iSeries Access for Web to provide access to your resources for your customers and suppliers. In this case, you also need to provide your customers and suppliers with a way people to access your iSeries server. Regardless, through iSeries Access for Web, iSeries shops to extend their host applications and data to a browser-based environment and give both users and business partners access over the Web.

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

by Jan et Weber

You can build a quick and easy Web site for your company with the customization support of iSeries Access for Web. No Java programming is required. You simply create HTML files and set configuration options. In this article, I demonstrate this capability by creating Web sites to sell books. This information is based on the functionality available with the V5R2 release of iSeries Access for Web. First introduced by IBM in September 2001, it provides a browser interface to iSeries resources, such as DB2 UDB, printer output, and C8/400 CL commands.

### Home page and template files

iSeries Access for Web ships a default home page. This page is displayed when you access the home page URL <http://csp01b01n1/webaccess/WWWHome>. The default home page is stored in the iSeries integrated file system in the following location: `/QIBMD/ProdData/Access/WWW2/html/homepage.html`

iSeries Access for Web also ships a default template file. The template file contains the HTML source displayed at the top and bottom of each iSeries Access for Web content page. The location of the default template file is `/QIBMD/ProdData/Access/WWW2/html/webaccess.html`. The %% value in the template file see explanation below. We will discuss these later in the article.

First of all, we need to create a customized home page and a customized template file. We do not want to modify or update the files under `/QIBMD/ProdData` since this directory tree is intended only for product files. Instead, we create a new directory named `/books/homepage` and place our files in it. Our customized home page contains links to view and order books. Our customized template file contains the company's logo. We discuss details of the file contents later in the article.



**Jan et Weber**  
Jan et Weber is an industry solutions engineer in the IBM Rochester, Minnesota laboratory. She has had a variety of roles on the DC Support, Client Access, and iSeries Access products. Her focus has been on programming in business. Jan et is currently a member of the iSeries Access for Web development team.

# 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





# iSeries Access for Web has many entry points

'URL Interfaces to iSeries Access for Web' manual available on the web

- Can enter at many different pages

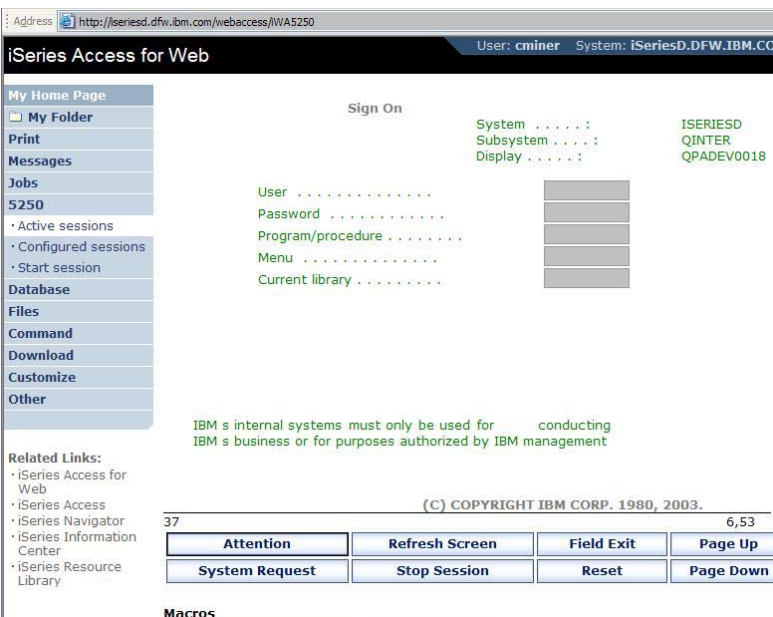
<http://<myiseries>/webaccess/iWAMain>

- Can use navigation bar to move from function to function

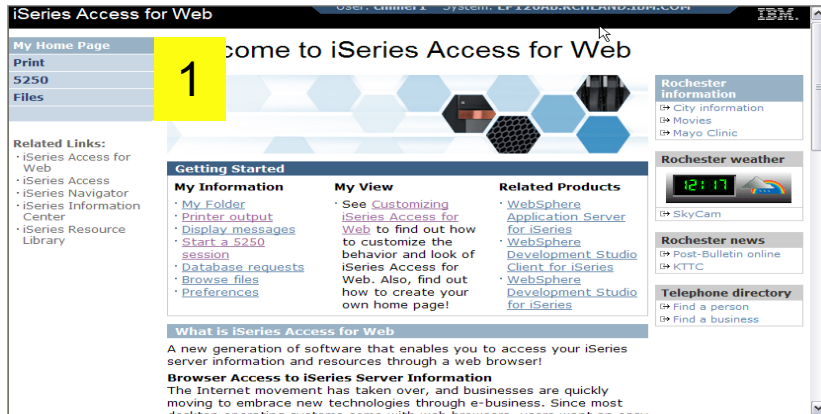
<http://<myiseries>/webaccess/iWA5250>



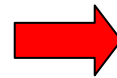
<http://<myiseries>/webaccess/iWASpool>



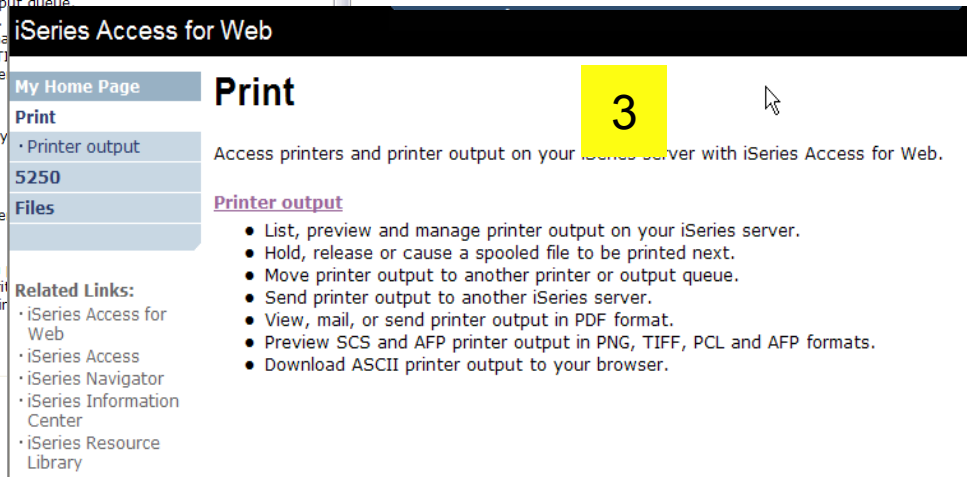
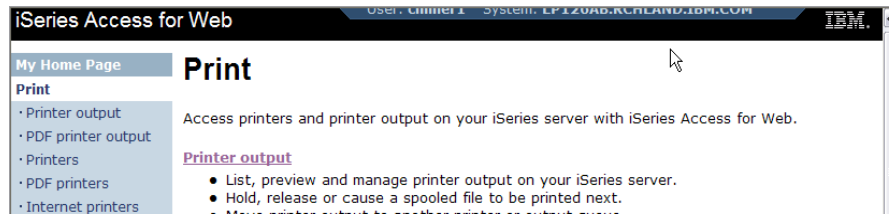
# Reduce functions you give to users



Reduce tabs that get displayed



Reduce options under tabs



# Printer Output - Spoolfile

## 1. Print Tab

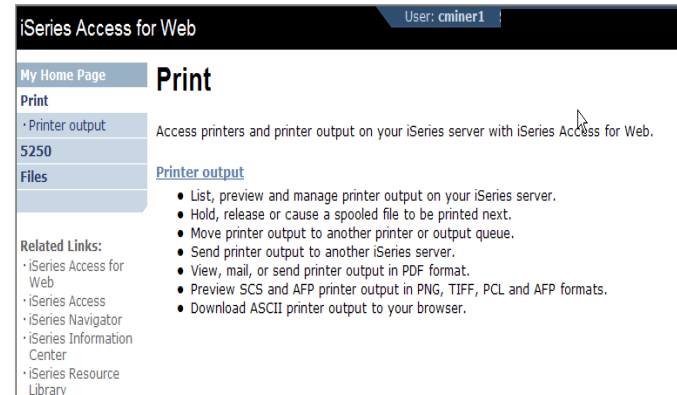
- User only has one option available, i.e. 'Printer output'

## 2. Default look of 'Printer Output'

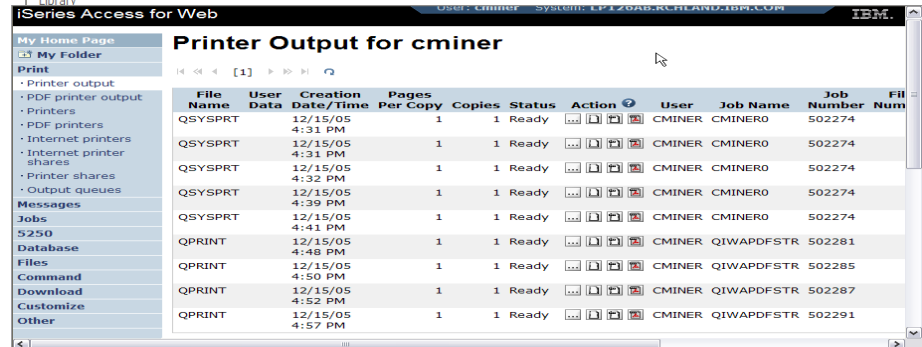
## 3. Customized look of 'Printer Output' for signed on user

- Removed many of the columns of printer output
- Reordered list
- Removed several end user actions

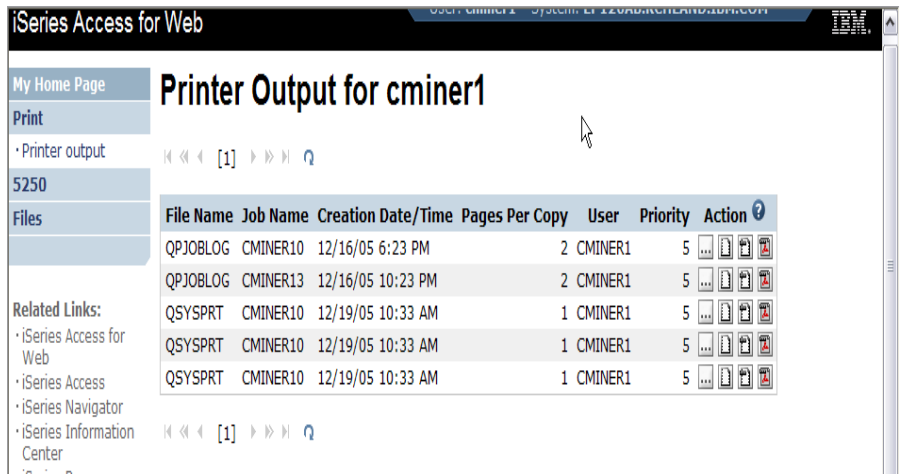
1



2

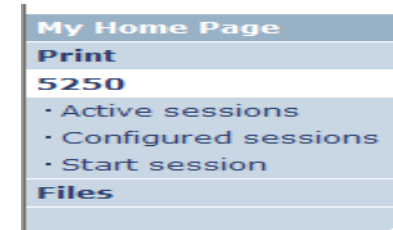


3

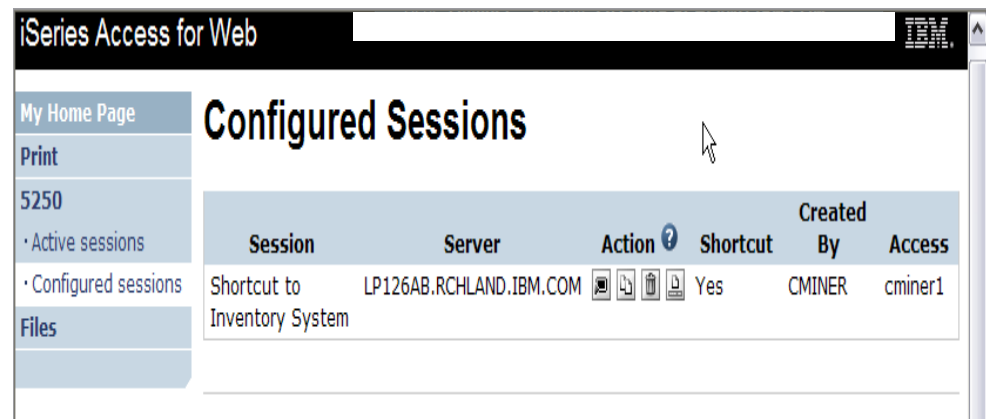
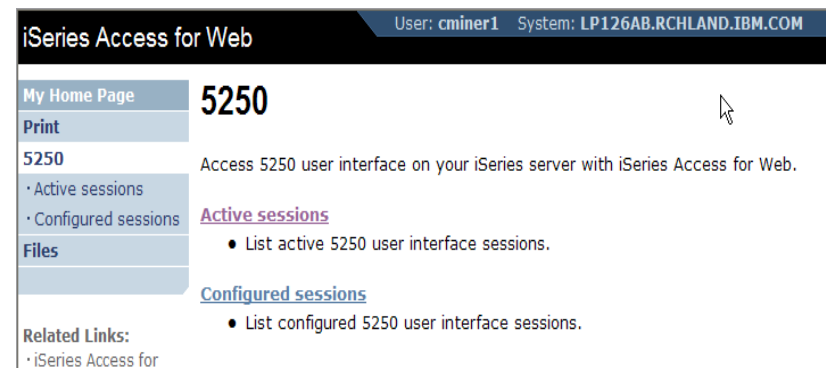


# Run Pre-configured 5250 Sessions

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



# 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

iSeries Access for Web

My Home Page  
Print  
5250  
Database  
· My requests  
Files  
Download

## My Requests

« « [1] » » »

Request	Description	Action	Shortcut	Created By	Access
Shortcut to Boats For Sale	View all available boats		Yes	CMINER	groupa
Shortcut to Find Boat To Buy	Select type and price limits		Yes	CMINER	*PUBLIC
Shortcut to My Customers Mailing	Mail Customer List		Yes	CMINER	groupa
Shortcut to My Customers Mailing	Mail Customer List		Yes	cminer	cminer1
Shortcut to Put My Customer List in Folder	Store Customer List		Yes	CMINER	groupa
Shortcut to request sql			Yes	secyesi	*PUBLIC
Shortcut to request upload			Yes	secyesi	*PUBLIC

« « [1] » » »

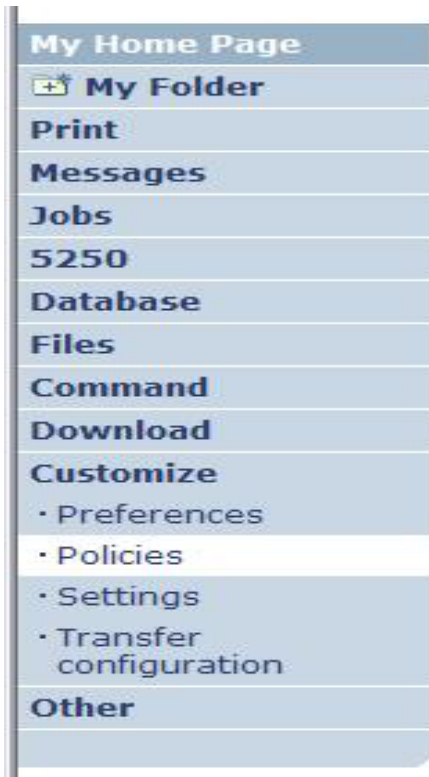


## Use 'out of the box'

- 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**

# iSeries Access for Web uses i5/OS User Profiles

When an iSeries 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 iSeries 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 iSeries 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 iSeries Access for Web functions**

For example:

- **A Files access policy can be set to 'Deny' to restrict a user or group from accessing the file function.**
- **Policies are saved and associated with the appropriate i5/OS user or group profile.**
- **Each 'Category' expands for granular control**

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

Related Links:  
· iSeries Access for Web  
· iSeries Access  
· iSeries Navigator  
· iSeries Information Center

## Policies

Profile: CMINER1

Action	Category	Description	Access
	5250	5250 user interface custom settings.	Allowed
	Command	Run batch command custom settings.	Allowed
	Customize	Preferences and policy administration custom settings.	Allowed
	Database	Database tables, requests, and run SQL custom settings.	Allowed
	Database connections	Create and edit database connection definitions.	Allowed
	Download	Download packages custom settings.	Allowed
	Files	Integrated file system and file share custom settings.	Allowed
	General	Page layout, language and character set custom settings.	Allowed
	Jobs	Work with jobs custom settings.	Allowed
	Mail	Send mail custom settings.	Allowed
	Messages	Display messages, send messages, and message queue custom settings.	Allowed
	My Folder	My Folder custom settings.	Allowed
	Print	Printer output, printers, printer shares and output queue custom settings.	Allowed
	Sametime	Lotus Sametime custom settings.	Allowed
	Other	Change password and other miscellaneous custom settings.	Allowed

# 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

A screenshot of the iSeries Access for Web interface. The browser address bar shows 'System: RCHLAND.IBM.COM'. The page title is 'Policies' and the profile is '\*PUBLIC'. A table lists various actions and their access status for the \*PUBLIC profile. The table has four columns: Action, Category, Description, and Access. The Access column shows 'Allowed' for all listed actions. A lightbulb icon is overlaid on the top right of the screenshot.

Action	Category	Description	Access
5250	5250	5250 user interface custom settings.	Allowed
Command	Command	Run batch command custom settings.	Allowed
Customize	Customize	Preferences and policy administration custom settings.	Allowed
Database	Database	Database tables, requests, and run SQL custom settings.	Allowed
Database connections	Database connections	Create and edit database connection definitions.	Allowed
Download	Download	Download packages custom settings.	Allowed
Files	Files	Integrated file system and file share custom settings.	Allowed
General	General	Page layout, language and character set custom settings.	Allowed
Jobs	Jobs	Work with jobs custom settings.	Allowed
Mail	Mail	Send mail custom settings.	Allowed
Messages	Messages	Display messages, send messages, and message queue custom settings.	Allowed
My Folder	My Folder	My Folder custom settings.	Allowed
Print	Print	Printer output, printers, printer shares and output queue custom settings.	Allowed
Sametime	Sametime	Lotus Sametime custom settings.	Allowed
Other	Other	Change password and other miscellaneous custom settings.	Allowed

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

Set a 'Default Directory' for:

- **\*PUBLIC**
- **Groups of users**
- **Specific user**

**Edit Policies - Files**  
Profile: CMINER1

Policy	Derived From	Action	Setting
Files access	Shipped default	Use current setting	Allow
Files tab	Shipped default	Use current setting	Show
Display directory contents in new window	Shipped default	Use current setting	No
Enable sort links for directory contents	Shipped default	Use current setting	Yes
Display directory contents statistics	Shipped default	Use current setting	Yes
Browse files	Profile setting	Use current setting	Allow
Copy files to server	Shipped default	Use current setting	Allow
Copy files from server	Shipped default	Use current setting	Allow
Default directory	Profile setting	Use current setting	/cminer1
Display subdirectory contents	Shipped default	Use current setting	Allow
Display parent directory contents	Shipped default	Use current setting	Allow
Display default	Shipped default	Use current setting	Deny

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

# 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**

File actions I can perform:

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

The screenshot shows the 'iSeries Access for Web' interface. The top navigation bar includes the user name 'User: CMINER1' and the system name 'System: LP120AB.RCHLAND.IBM.COM'. The main content area is titled 'Directory Contents /CMINER1'. On the left, there is a navigation menu with options like 'My Home Page', 'Print', '5250', 'Files', and 'Browse files'. The main content area contains a 'Copy Files to Server' button and a 'Create Directory' link. Below this, it states 'Found 0 directories. Found 4 files with a total size of 13,928,795 bytes.' A table lists the files with columns for Name, Size (bytes), Type, Modified, and Action. The files listed are:

Name	Size (bytes)	Type	Modified	Action
<a href="#">AMP23 Use iSeries Access for iSeries Database Access.ppt</a>	12799488	File	12/19/05 11:32:18 AM	[Icons]
<a href="#">ASJ_2005_NovDec_A new beta is out for iSeries Access for Web.doc</a>	873472	File	12/19/05 11:29:19 AM	[Icons]
<a href="#">ISN_2005_Dec_Cool Tips about iSeries Access.doc</a>	158208	File	12/19/05 11:30:36 AM	[Icons]
<a href="#">V5R4 iSeries Access for Web RUN SQL Output Options.JPG</a>	97627	File	12/19/05 11:31:34 AM	[Icons]

At the bottom of the interface, there is a 'Copy Files to Server' button.

# Preferences

Preferences are used to control how functions operate

- For example, a user can select which columns to display when viewing a the My Folder list
- By default, all users can configure their own preferences
- Preferences are saved and associated with the user's iSeries user profile

**Edit Preferences - My Folder**

Maximum folder items allowed: No maximum  
Maximum folder size allowed: No maximum

Preference	Derived From	Action	Setting
My Folder tab	Shipped default	Use current setting	Show
Mark folder items opened/unopened	Shipped default	Use current setting	Yes
My Folder notification	Shipped default	Use current setting	E-mail and Sametime
Notify on new folder items	Shipped default	Use current setting	Yes
Notify on folder items threshold	Shipped default	Use current setting	Yes
Folder items threshold	Shipped default	Use current setting	100 %
Notify on folder size threshold	Shipped default	Use current setting	Yes
Folder size threshold	Shipped default	Use current setting	100 %
E-mail address to notify	E-mail address	Use current setting	cminer@us.ibm.com
Sametime user to notify	Shipped default	Use current setting	
My Folder columns	Shipped default	Use current setting	Columns...
My Folder sort columns	Shipped default	Use current setting	Date/Time



**5250 is the only function in iSeries Access for Web that requires the interactive feature.**

**All other functions run as batch tasks.**

# Start a 5250 Session

## Select to 'Start Session'

1

- Provide name of System i you wish to connect to → can be any System i in the network
- Provide how you want Workstation ID handled
- Can check to Bypass additional i5/OS sign-on screen

**Start Session**

**Server**

Server: MYISERIES.RCHLAND.IBM.COM

Port: 23

Code page: 37

**Workstation ID**

Use user ID

Specify workstation ID

Avoid duplicates for this user

Avoid duplicates with other users

**General**

Initial macro:

Bypass signon

Display HTML data in fields

**Start Session**

[Active sessions](#)  
Work with your active sessions.

[Configured sessions](#)  
Work with your configured sessions.

2

Once you are connected, click on the 'Active' session link to reconnect to or save the session

**OS/400 Main Menu** System: LP126AB

Select one of the following:

1. User tasks
2. Office tasks
3. General system tasks
4. Files, libraries, and folders
5. Programming
6. Communications
7. Define or change the system
8. Problem handling
9. Display a menu
10. Information Assistant options
11. iSeries Access tasks
12. Sign off

Selection or command  
====>

**Exit** **Prompt** **Retrieve** **Cancel** **Information Assistant**

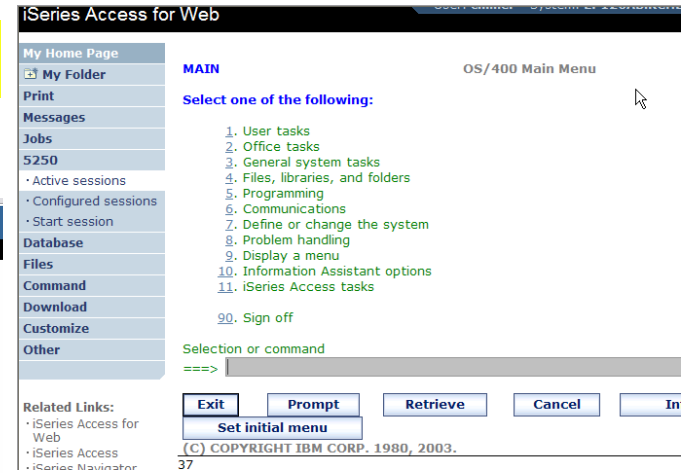
Type option number or command.  
37 MW 20,7

**Macros**  
**Start Recording**

# Change look of 5250 session

## 1. Default 'web' look

1

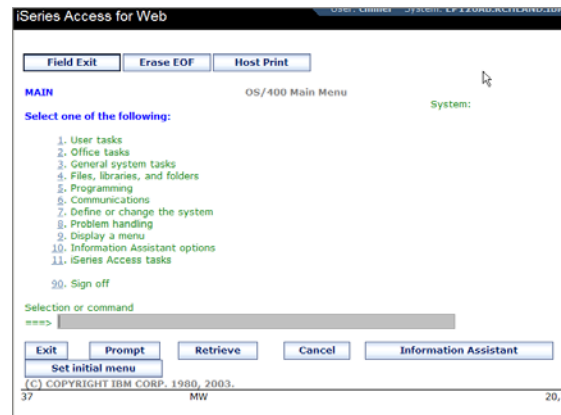


## 2. Changed colors, added keypad at side, changed buttons at bottom to words

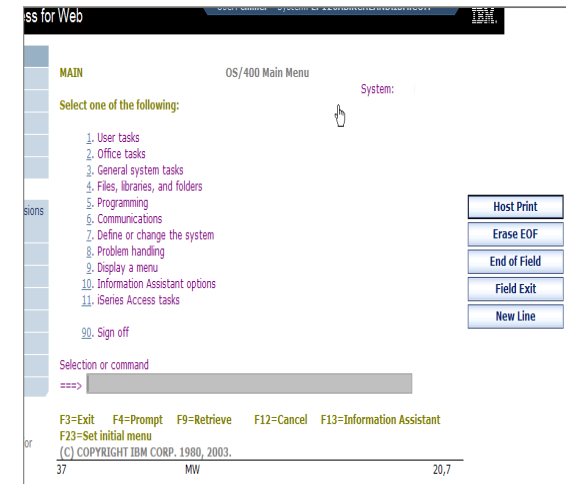


2

## 3. Removed navigation bar, put keypad on top



## 4. Selected 'traditional' view, removed navigation bar



3





# iSeries 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



iSeries Access for Web

## Copy Data to Table

My Home Page  
My Folder  
Print  
Messages  
Jobs  
5250  
Database

- Tables
- My requests
- Run SQL
- Copy data to table
- Import request
- Import query
- Extract server data

Files  
Command  
Download  
Customize

**File to Copy** ?

File:  Browse...

File type: Comma Separated Value (.csv) Settings

**Table to Receive Data** ?

Table:

Action: Replace data if table exists

**Connection** ?

Connection: IBM Toolbox for Java - LP126AB.RCHLAND.IBM.COM

Copy Data to Table Save Request...

# Create System i Table

iSeries Access for Web User: CMINER System: LP116AB

**Copy Data to Table**

Table BOATS.DATA does not exist.

Create options

View or change column definitions before creating table

Create table using the source file's column definitions

- My Home Page
- My Folder
- Print
- Messages
- Jobs
- 5250
- Database
  - Tables
  - My requests
  - Run SQL

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

Copy Data To Table [LP116AB.RCHLAND.IBM.COM] - Mozilla Firefox

http://lp116ab:2016/webaccess/WADbUpload

**iSeries Access for Web**  
cmminer LP116AB.RCHLAND.IBM.COM

**Table Column Definitions**

Verifying column definitions before creating the table is recommended. You can change any of the column definition attributes before clicking Create Table.

Column	Description	Type	Length	Scale	Sample Data
EMPNO		CHAR	6	0	200340
FIRSTNME		CHAR	9	0	ROY
MIDINIT		CHAR	1	0	R
LASTNAME		CHAR	10	0	ALONZO
WORKDEPT		CHAR	3	0	E21
PHONENO		CHAR	4	0	5698
HIREDATE		CHAR	8	0	5/5/47
JOB		CHAR	8	0	FIELDREP
EDLEVEL		FLOAT	0	0	16.0
SEX		CHAR	1	0	M
BIRTHDATE		CHAR	8	0	1/1/01
SALARY		FLOAT	0	0	23840.0
BONUS		FLOAT	0	0	500.0
COMM		FLOAT	0	0	1907.0



# 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



SQL Wizard if you don't know SQL

iSeries Access for Web

My Home Page

- My Folder
- Print
- Messages
- Jobs
- 5250
- Database
  - Tables
  - My requests
  - Run SQL
  - Copy data to table
  - Import request
  - Import query
  - Extract server data
- Files
- Command
- Download
- Customize
- Other

Related Links:

- iSeries Access for Web
- iSeries Access
- iSeries Navigator
- iSeries Information

## Run SQL

**SQL Statement**

```
SELECT "BCOST", "BYEAR", "BTYP", "BNAME", "BFEET", "BNT01"
FROM BOATS.BOATS
WHERE ( "BCOST" > 10000 )
```

**SQL Wizard**

**SQL Output**

Type: Microsoft Excel XML (.xml) **Settings**

Destination: Mail as attachment **Settings**

**Format**

Date: 12/23/05

Time: 10:16:44 AM

**Connection**

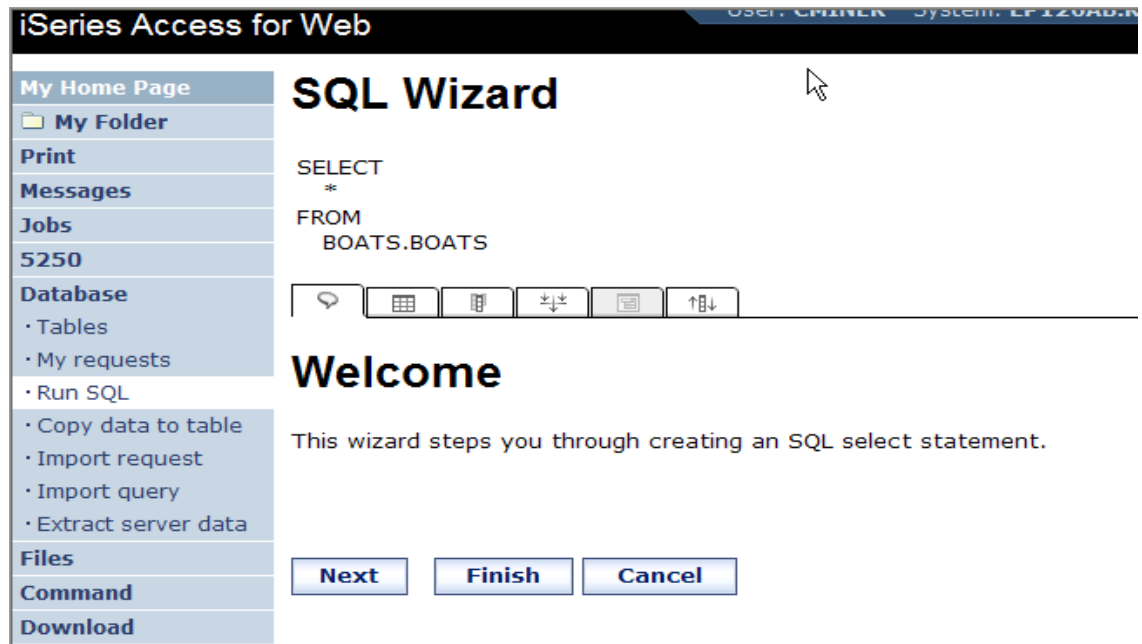
Connection: IBM Toolbox for Java - ...RCHLAND.IBM.COM

**Run SQL** **Save Request...**

# 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**



# Printing





# Work with Printer Output, Printers, Queues

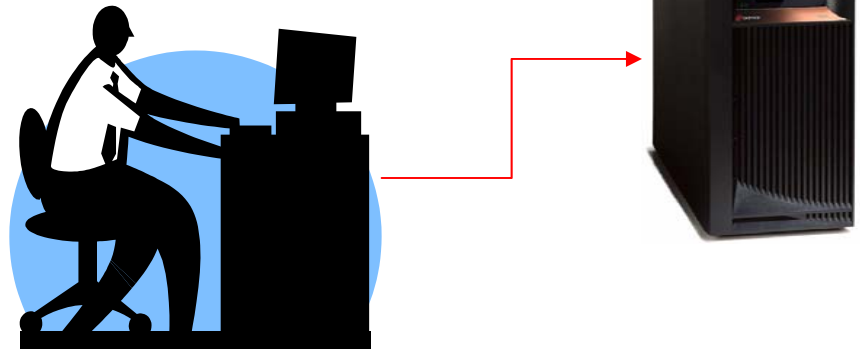
## Typical end user printer tasks

- **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://<myseries>/webaccess/iWASpool>

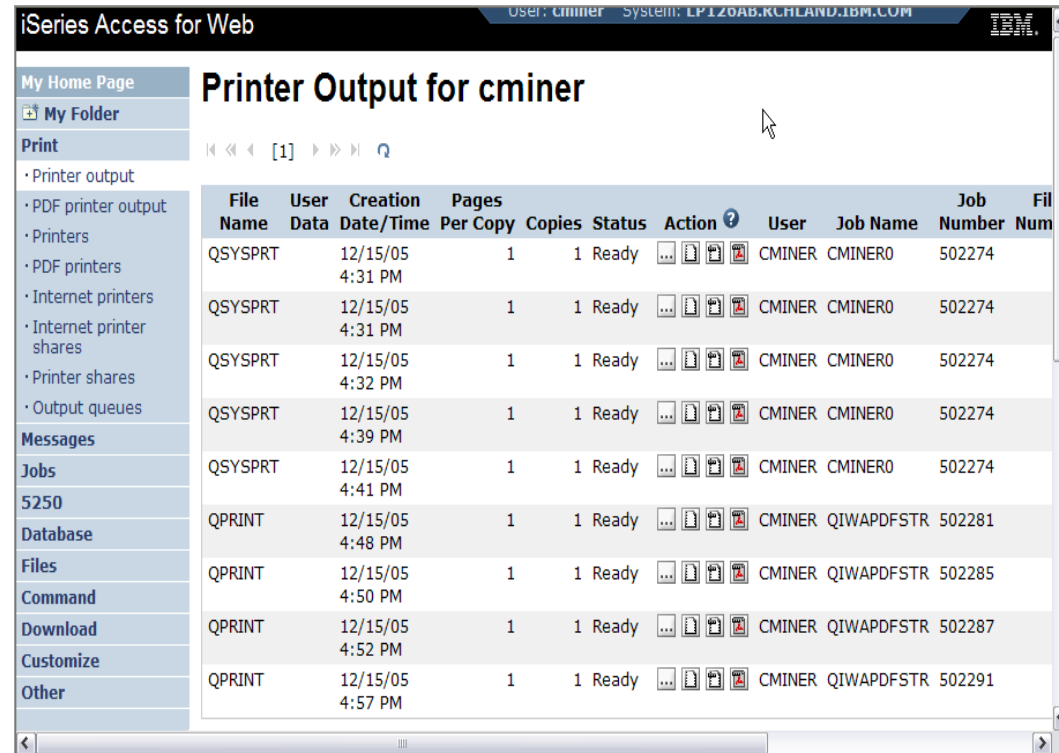
## My 'printer output'

### 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



The screenshot shows the 'iSeries Access for Web' interface. The title bar indicates the user is 'cminer' and the system is 'LP126AB.RCHLAND.IBM.COM'. The main heading is 'Printer Output for cminer'. Below the heading is a navigation bar with a search icon and a page indicator '[1]'. A left-hand navigation menu contains options like 'My Home Page', 'My Folder', 'Print', 'Printer output', 'PDF printer output', 'Printers', 'PDF printers', 'Internet printers', 'Internet printer shares', 'Printer shares', 'Output queues', 'Messages', 'Jobs', '5250', 'Database', 'Files', 'Command', 'Download', 'Customize', and 'Other'. The main content area displays a table of printer jobs.

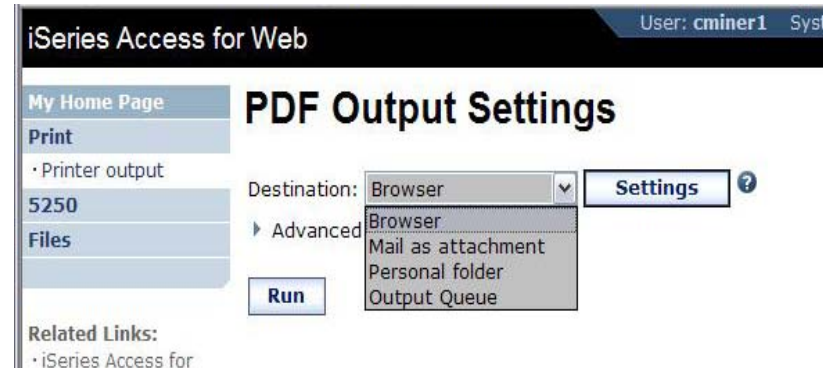
File Name	User Data	Creation Date/Time	Pages Per Copy	Copies	Status	Action	User	Job Name	Job Number	File Number
QSYSPRT		12/15/05 4:31 PM	1	1	Ready	...	CMINER	CMINER0	502274	
QSYSPRT		12/15/05 4:31 PM	1	1	Ready	...	CMINER	CMINER0	502274	
QSYSPRT		12/15/05 4:32 PM	1	1	Ready	...	CMINER	CMINER0	502274	
QSYSPRT		12/15/05 4:39 PM	1	1	Ready	...	CMINER	CMINER0	502274	
QSYSPRT		12/15/05 4:41 PM	1	1	Ready	...	CMINER	CMINER0	502274	
QPRINT		12/15/05 4:48 PM	1	1	Ready	...	CMINER	QIWAPDFSTR	502281	
QPRINT		12/15/05 4:50 PM	1	1	Ready	...	CMINER	QIWAPDFSTR	502285	
QPRINT		12/15/05 4:52 PM	1	1	Ready	...	CMINER	QIWAPDFSTR	502287	
QPRINT		12/15/05 4:57 PM	1	1	Ready	...	CMINER	QIWAPDFSTR	502291	

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

# Printer Output - Spoolfile

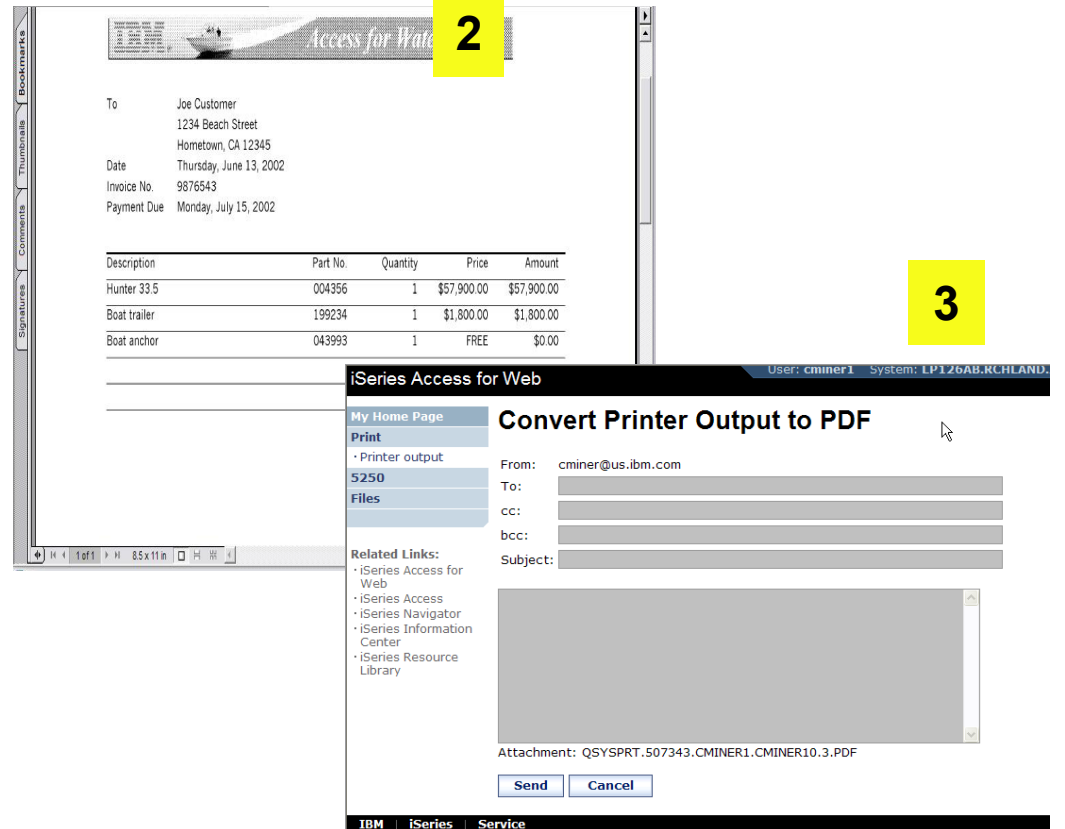
## 1. Requested 'View PDF'

- 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

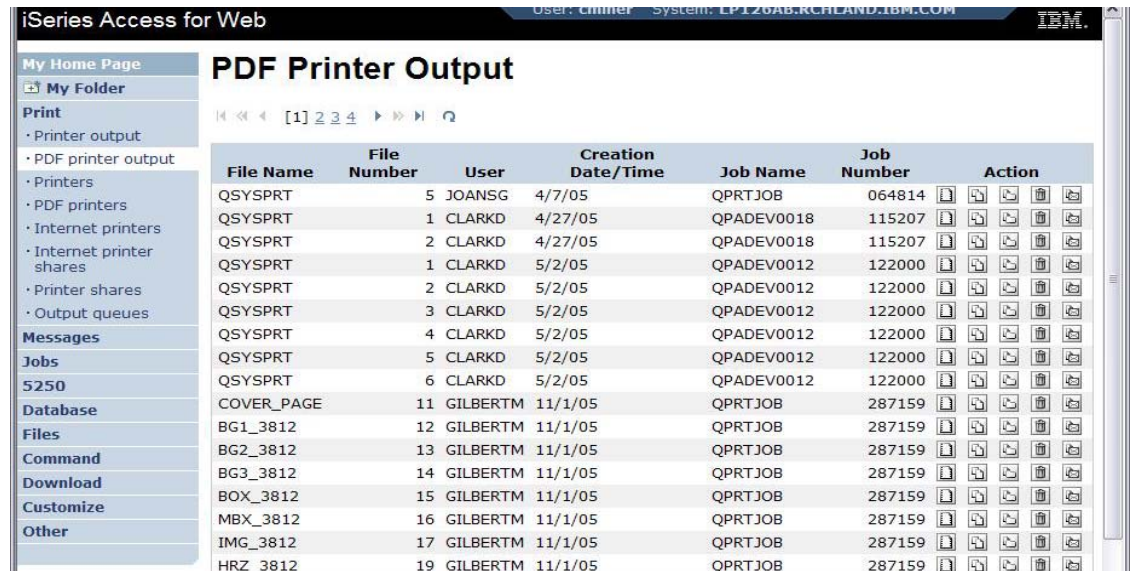
# PDF Printer Output

<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



File Name	File Number	User	Creation Date/Time	Job Name	Job Number	Action
QSYSPRT	5	JOANSG	4/7/05	QPRTJOB	064814	[Icons]
QSYSPRT	1	CLARKD	4/27/05	QPADEV0018	115207	[Icons]
QSYSPRT	2	CLARKD	4/27/05	QPADEV0018	115207	[Icons]
QSYSPRT	1	CLARKD	5/2/05	QPADEV0012	122000	[Icons]
QSYSPRT	2	CLARKD	5/2/05	QPADEV0012	122000	[Icons]
QSYSPRT	3	CLARKD	5/2/05	QPADEV0012	122000	[Icons]
QSYSPRT	4	CLARKD	5/2/05	QPADEV0012	122000	[Icons]
QSYSPRT	5	CLARKD	5/2/05	QPADEV0012	122000	[Icons]
QSYSPRT	6	CLARKD	5/2/05	QPADEV0012	122000	[Icons]
COVER_PAGE	11	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
BG1_3812	12	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
BG2_3812	13	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
BG3_3812	14	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
BOX_3812	15	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
MBX_3812	16	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
IMG_3812	17	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
HRZ_3812	19	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]

**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)

# Installation and Configuration

# Get iSeries Access for Web running

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

# iSeries Access for Web Documentation on the Web...

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

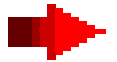


Connecting to iSeries: iSeries Access for Web (Information Center)	<a href="#">HTML</a> <a href="#">PDF</a>
URL Interfaces to V5R4 iSeries Access for Web	<a href="#">PDF</a>

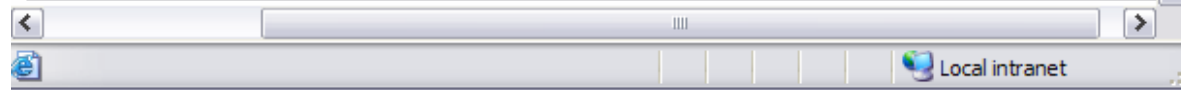
→ [Back to top](#)

## V5R3

V5R3 iSeries Access for Web is supported on V5R3 i5/OS and V5R2 OS/400.



Connecting to iSeries: iSeries Access for Web (Information Center)	<a href="#">HTML</a> <a href="#">PDF</a>
WAS V6.1 for i5/OS (Base, Express, ND) - Setup/Configuration example	<a href="#">PDF</a>
WAS V6.0 for iSeries (Base, Express) - Setup/Configuration Example	<a href="#">PDF</a>
WAS - Express for iSeries V5.1 - Setup/Configuration Example	<a href="#">PDF</a>
WAS - Express for iSeries V5.0 - Setup/Configuration Example	<a href="#">PDF</a>
WAS V5.1 for iSeries (Base, Network Deployment) - Setup/Configuration Example	<a href="#">PDF</a>
WAS V5.0 for iSeries (Base, Network Deployment) - Setup/Configuration Example	<a href="#">PDF</a>
Apache Software Foundation (ASF) Tomcat - Setup/Configuration Example	<a href="#">PDF</a>
Workplace Services Express V2.5 - Setup/Configuration Example	<a href="#">PDF</a>
WebSphere Portal Enable for Multiplatforms V5.1 - Setup/Configuration Example	<a href="#">PDF</a>
WebSphere Portal - Express for iSeries V5.0 - Setup/Configuration Example	<a href="#">PDF</a>
WebSphere Portal - Express for iSeries V5.0 Configuring the use of authenticated WebSphere credential for Single Sign-On (SSO) and iSeries Access for Web portlets	<a href="#">HTML</a> <a href="#">PDF</a>
URL Interfaces to V5R3 iSeries Access for Web	<a href="#">PDF</a>



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

# Software Requirements



Product Number	Product Name	Option	\$
5722-SS1	V5R3 iSeries Access for Web: V5R2 OS/400 or V5R3 i5/OS V5R4 iSeries Access for Web: V5R3 and later i5/OS	Base	w/HW
5722-SS1	OS/400 - Extended Base Directory Support	3	N/C
5722-SS1	OS/400 - AFP Compatibility Fonts	8	N/C
5722-SS1	OS/400 - Host Servers	12	N/C
5722-SS1	Operating System/400 QShell Interpreter	30	N/C
5722-SS1 5722-AC3	<ul style="list-style-type: none"> <li>If you plan to use Secure Sockets Layer (SSL): OS/400 Digital Certificate Manager</li> <li>Cryptographic Access Provider (128-bit)</li> </ul>	34	N/C N/C
5722-DG1	IBM HTTP Server for iSeries	Base	N/C
5722-JV1	Developer Kit for Java Developer Kit for Java Version 1.2 Developer Kit for Java Version 1.3 Developer Kit for Java Version 1.4 (Check WebSphere doc for required version)	Base 3 5 6	N/C N/C N/C N/C
5722-JC1	Toolbox for Java	Base	N/C
5722-TC1	TCP/IP Connectivity Utilities for iSeries	Base	N/C



# Software Requirements (continued)

Product Number	Product Name	Option	\$
5722-XW1	iSeries Access Family	Base	\$
5722-XH2	iSeries Access for Web <ul style="list-style-type: none"> <li>• Ships with 5722-XW1 iSeries Access Family</li> <li>• V5R3 iSeries Access for Web runs on OS/400 V5R2 and i5/OS V5R3</li> <li>• V5R4 iSeries Access for Web runs on i5/OS V5R3 and V5R4</li> </ul>	Base	part of XW1
5722-IP1	IBM Info Print Server ( <b>Optional</b> -- enables best PDF output: - <b>is not</b> 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 5722-E51 5733-W51 5722-IWE 5733-WS5  5722-DG1 5722-DG1  * * * *	<p><u>One, or more, of the following web servers</u></p> <ul style="list-style-type: none"> <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> <ul style="list-style-type: none"> <li>• Apache Software Foundation Tomcat</li> <li>• Integrated web application server</li> </ul> <ul style="list-style-type: none"> <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>	See documentation	

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/series/software/websphere/wsappserver/>
- ASF Tomcat <http://www.ibm.com/servers/eserver/series/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>

# Client Browser Requirements

- These browsers have been tested with **V5R4** iSeries Access for Web:
  - Firefox 1.0.2 (Windows, Linux)
  - Internet Explorer 6.0 with Service Pack 1 (Windows)
  - Opera 7.54 (Windows, Linux)
  - Mozilla 1.7 (Windows, Linux, AIX)
  - Other browsers that support the current HTTP and HTML specifications should work, but have not been tested with iSeries Access for Web.
- These browsers have been tested with **V5R3** iSeries Access for Web:
  - Netscape 4.7 (AIX)
  - Netscape 7.0 (Windows, Linux)
  - Internet Explorer 6.0 with Service Pack 1 (Windows)
  - Opera 7.11 (Windows, Linux)
  - Mozilla 1.3 and 1.4 (Windows, Linux)
  - Other browsers that support the current HTTP and HTML specifications should work, but have not been tested with iSeries Access for Web.

## • Set browser to allow 'Cookies'

- **iSeries Access for Web requires that the web browser allow cookies. Set the cookie configuration option to allow cookies.**

# Options setting up iSeries Access for Web environment

- **Step by Step**
  - **Greatest flexibility**
  - **Choice of WebSphere Application Server version or Tomcat**
  - **May already have components on your system**
  
- **Integrated Web application server**
  - **Simplest to set up**
  - **Preconfigured HTTP web server**

# Step by Step

## Formula for successful setup and configuration

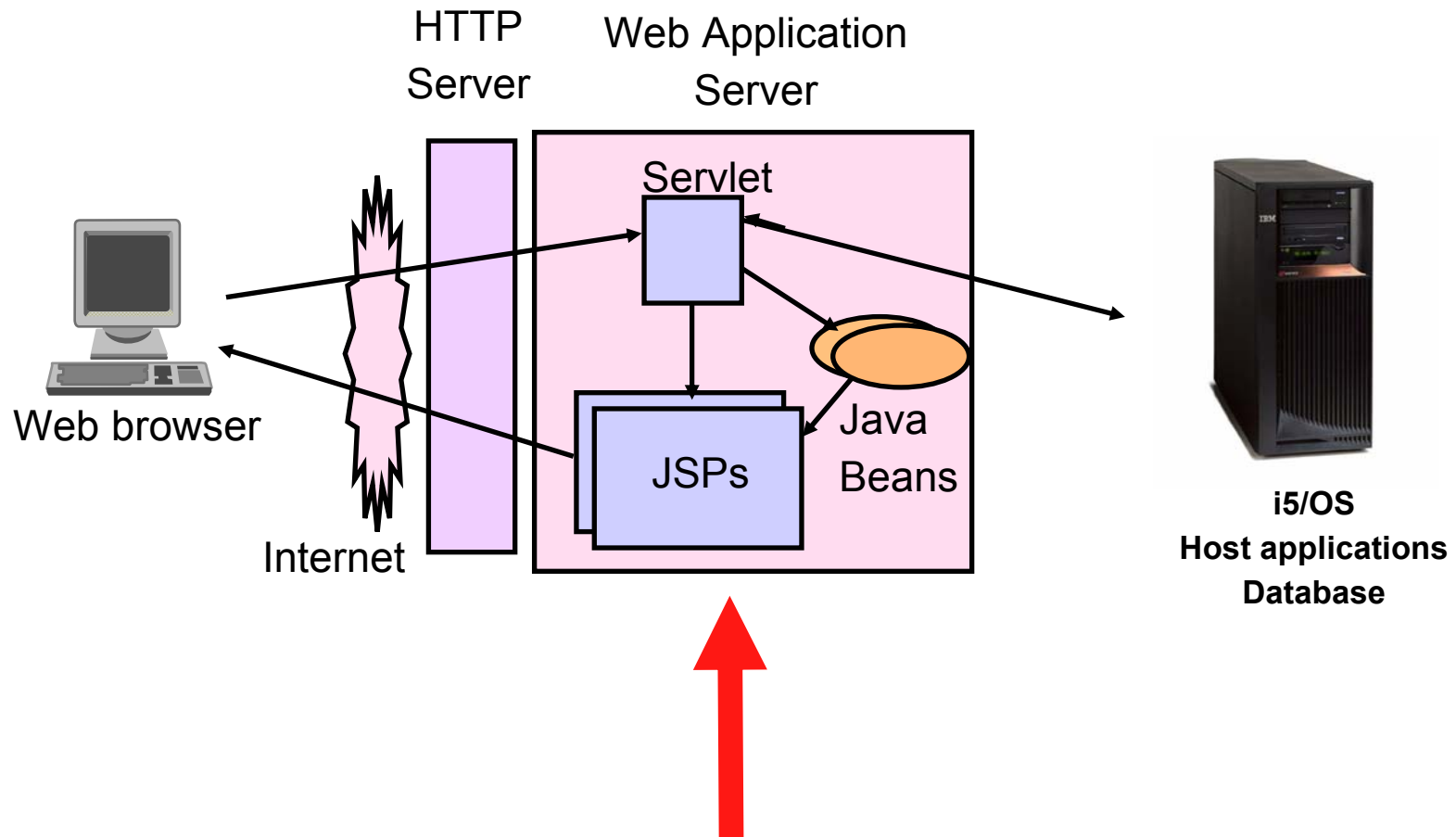
You need to do the following in this order:

1. Decide which web application server environment to run
2. Install iSeries Access for Web on your i5/OS system
3. Verify, load, apply any additional PTFs
  - Cumulative PTF package
  - WebSphere, HTTP web server for i5/OS
  - iSeries Access for Web
4. Setup web-serving environment
5. Configure iSeries Access for Web
6. Verify the installation and configuration

### Information resources:

- These steps are detailed in iSeries Access for Web InfoCenter information
- iSeries Access for Web Installation and Configuration Lab – email Linda for a copy
- Examples at <http://www.ibm.com/systems/i/software/access/web/doc.html>

# Decide which web application server environment to run



# Step by Step

## Decide which web application server environment to run

- iSeries Access for Web can be deployed to a variety of web serving environments.
- Servlets
  - WebSphere Application Server V6.1 for i5/OS (Express, Base, Network Deployment)
  - WebSphere Application Server V6.0 for OS/400 (Express, Base, Network Deployment)
  - WebSphere Application Server V5.1 - Express for iSeries
  - WebSphere Application Server V5.1 for iSeries (Base and Network Deployment)
  - WebSphere Application Server V5.0 - Express for iSeries
  - WebSphere Application Server V5.0 for iSeries (Base and Network Deployment)
  - ASF Tomcat
    - The ASF Tomcat included as part of the no-charge IBM HTTP Server for iSeries (5722-DG1)
    - ASF Tomcat PTFs are delivered within the IBM HTTP Server for iSeries Group HTTP PTFs.
- Portlets
  - IBM WebSphere Portal – Express/Express Plus for Multiplatforms V5.0.2.2
  - IBM WebSphere Portal Enable for Multiplatforms V5.1.0.1
  - IBM WebSphere Portal V6.0
  - IBM Workplace Services Express V2.5, V2.6

## Install iSeries Access for Web on your i5/OS system





# Step by Step

## Install iSeries Access for Web on your i5/OS system

- Installing iSeries Access for Web
  - Use the RSTLICPGM command to restore (install) product 5722-XH2
  - RSTLICPGM LICPGM(5722XH2) DEV(OPT01) OPTION(\*BASE)
- The restore will...
  - Create library QIWA2 and objects in QIWA2
  - Create file system directories
    - /QIBM/ProdData/Access/Web2/...
    - /QIBM/UserData/Access/Web2/...
  - Set basic ownership/authorities for library and file system objects
- The restore will not...
  - Make any changes to HTTP server configurations
  - Make any changes to web application server configurations
  - Enable use of iSeries Access for Web

# Step by Step

## Install iSeries Access for Web on your i5/OS system (continued)

- No coexistence between V5R2, V5R3, and V5R4 iSeries Access for Web
- If iSeries Access for Web is already installed on the i5/OS system...
  - Installing/upgrading to a later release will replace the installed version.
  - QIWA2/CFGACCWEB2 must be run after installing a newer release of iSeries Access for Web.
  - Running CFGACCWEB2 enables/deploys new functions.
  - The web application server must be restarted after CFGACCWEB2 is run.
  - Refer to the InfoCenter information for information on upgrading from a previous release to V5R4 iSeries Access for Web.



**Verify, load, apply any additional PTFs**



# Step by Step

## Verify, load, apply any additional PTFs

- Each component of the web application serving environment has PTFs
  - WebSphere Application Server
  - i5/OS Cumulative PTF package
  - HTTP web server
  - WebSphere Portal/Workplace Services Express
  - iSeries Access for Web
- PTFs for the above components should be verified and updated as needed
- WebSphere Application Server
  - <http://www.ibm.com/servers/eserver/series/software/websphere/wsappserver/>
  - Click the **PTFs** link, click the link for i5/OS release/WebSphere version

# Reference: WebSphere Application Server

<http://www.ibm.com/eserver/series/software/websphere/wsappserver>

IBM Systems > System i >

## WebSphere Application Server

for i5/OS

- WebSphere Home
- What's New
- About WebSphere
- Ordering
- Documentation
- FAQs
- Business Solutions
- Samples
- PTFs
- Performance
- Coexistence
- Migration
- Forum
- Newsletter
- Related Resources

### Features

WebSphere Application Server Version 6.1 for i5/OS is announced. To find out more about the new version or any other of the supported versions — please click on the links below:

#### Version 6.1

- IBM WebSphere Application Server V6.1 for i5/OS
- IBM WebSphere Application Server for Developers V6.1 for i5/OS
- IBM WebSphere Application Server Network Deployment V6.1 for i5/OS
- IBM WebSphere Application Server – Express V6.1 for i5/OS

#### Version 6.0

- IBM WebSphere Application Server V6.0 for OS/400
- IBM WebSphere Application Server for Developers V6.0 for OS/400
- IBM WebSphere Application Server Network Deployment V6.0 for OS/400
- IBM WebSphere Application Server – Express V6.0 for OS/400


#### Version 5.1



- IBM WebSphere Application Server V5.1 for iSeries
- IBM WebSphere Application Server for Developers V5.1 for iSeries
- IBM WebSphere Application Server Network Deployment V5.1 for iSeries
- IBM WebSphere Application Server – Express for iSeries V5.1


#### Version 5.0

- IBM WebSphere Application Server V5.0 for iSeries
- IBM WebSphere Application Server Network Deployment V5.0 for iSeries
- IBM WebSphere Application Server – Express for iSeries V5.0

### Need directions?



- [iSeries Developer roadmap](#)
-  [An Independent Analysis of the iSeries Developer Roadmap - Updated for 2006 \(1.4MB\)](#)
-  [The Business Benefits of iSeries Application Modernization \(183KB\)](#)

 [Get Adobe® Reader®](#)

### Emerging Technology

- [Dynamic web site development for the non-technical business user.](#)

### Pilot Pricing Program

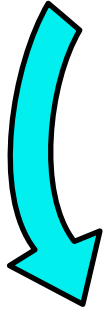
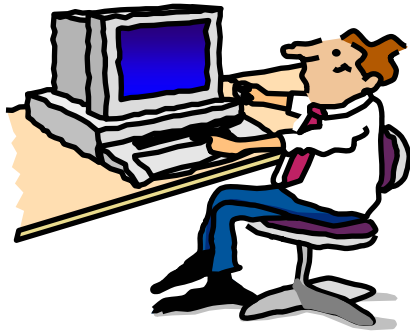
- [IBM Software Pilot Pricing Program for IBM eServer i5 520 Systems](#)

Local intranet


# Step by Step

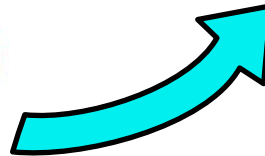
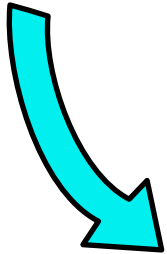
## Verify, load, apply any additional PTFs (continued)

- i5/OS Cumulative PTF package
  - The WebSphere Application Server group PTF identifies an i5/OS Cumulative PTF package.
  - The i5/OS PTF package specified is the level the WebSphere group PTF was tested with.
  - You may be able to successfully run with an earlier or later cumulative PTF package.
  
- HTTP web server
  - <http://www.ibm.com/servers/eserver/series/software/http>
    - Click the Support tab
  - V5R4 i5/OS
    - WRKPTFGRP SF99114
  - V5R3 i5/OS
    - WRKPTFGRP SF99099
  
- iSeries Access for Web
  - <http://www.ibm.com/systems/i/software/access/web/servicepacks.html>
  - Always check the cover letter special instructions, may have to run CFGACCWEB2 to enable changes.



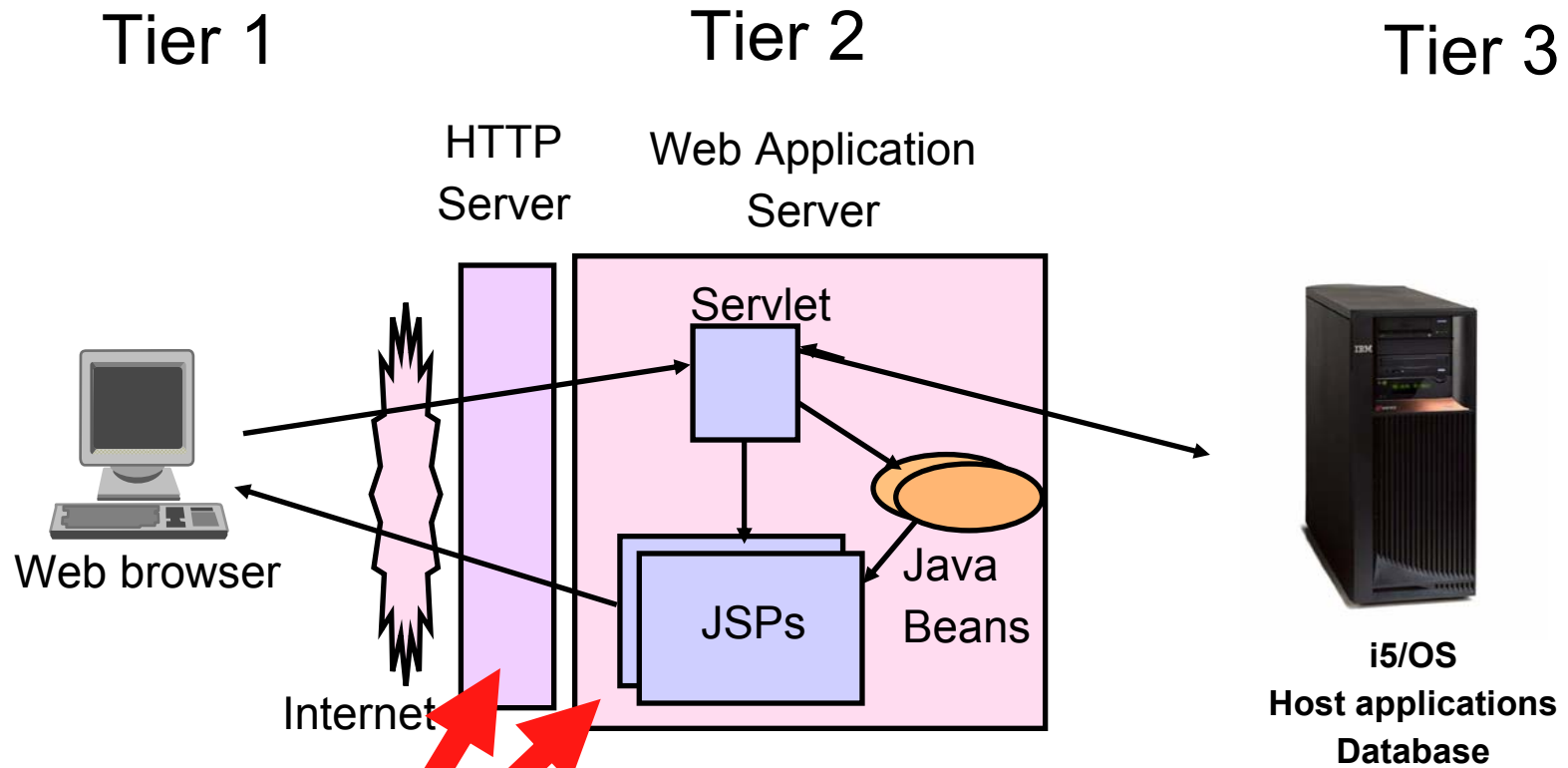
## Setup up web-serving environment

 HTTP Server for iSeries



# Step by Step

## Setup web-serving environment



Need to create...



# Step by Step

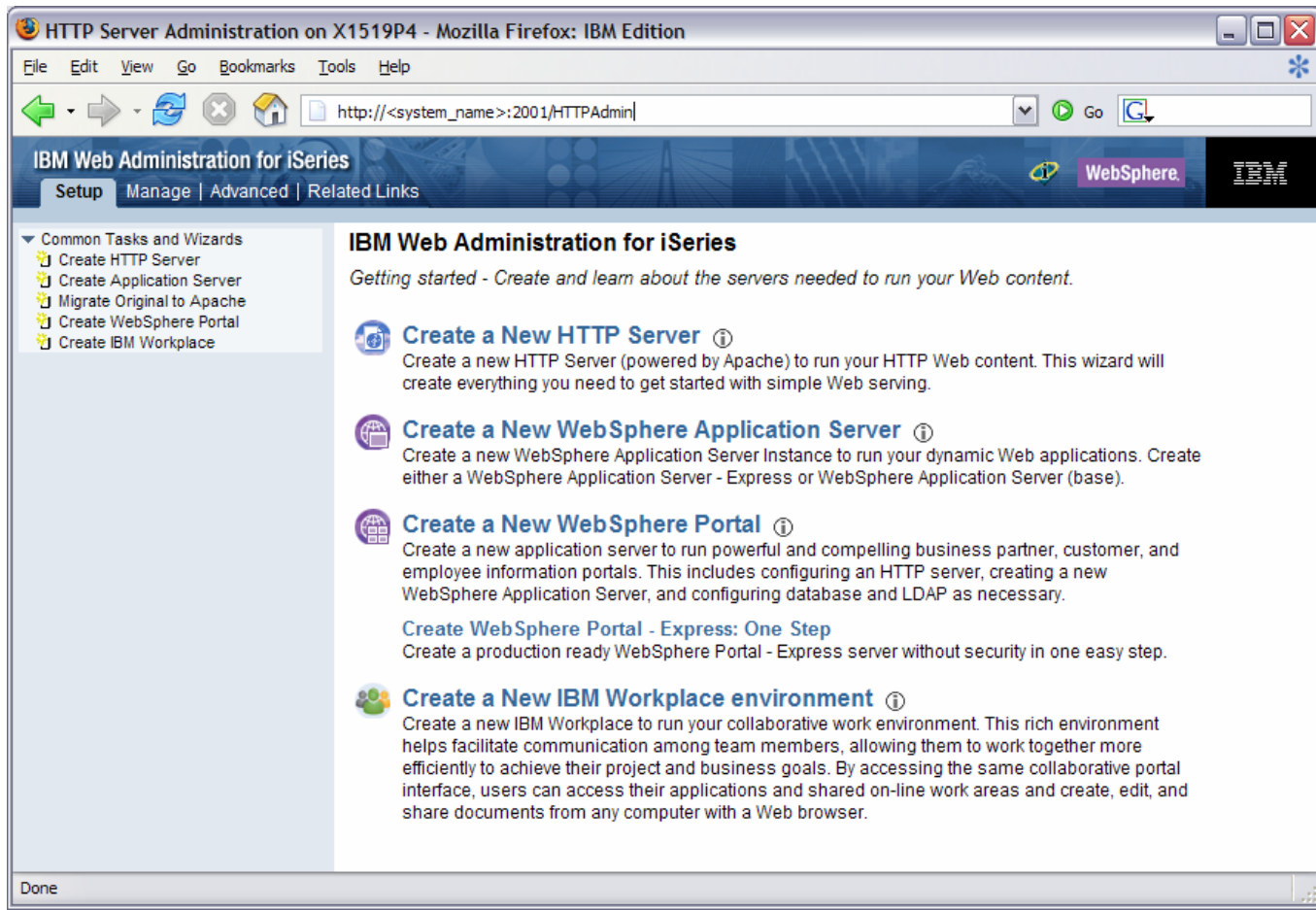
## Setup web-serving environment (continued)

- HTTP web server
  - Front door for into your web serving environment
  - HTTP/HTTPS (SSL)
  - Listens for web requests on a specific TCP/IP port
  - An HTTP server is configured to "talk" to a specific web application server
  - Routes web requests between and end-user browser and a web application sever
  
- WebSphere web application server (WAS)
  - Profiles (instances) are created containing a web application server
  - The web application server provides an environment for the deployment and management of web applications
  - Many different WAS versions can be installed and coexist on an i5/OS system
  - All web applications running within a web application server share the same name space.
  - You could create multiple profiles (instances) on a single i5/OS for the following reasons:
    - To create separate development environments for different developers. This allows them to have different versions of the same objects in their own name space.
    - To create separate development and test environments

# Step by Step

## Setup web-serving environment (continued)


- Use IBM Web Administration for i5/OS
  - Easy to use wizard that prompts for required information and does all the work
  - STRTCPSVR SERVER(\*HTTP) HTTPSVR(\*ADMIN)
  - `http://<system_name>:2001/HTTPAdmin`



# Step by Step -- a word about Tomcat

- Use IBM Web Administration for i5/OS to manage ASF Tomcat servers
  - To access the IBM Web Administration for i5/OS interface
    - STRTCPSVR \*HTTP HTTPSVR(\*ADMIN)
    - http://<your\_server\_name>:2001
- CL commands to start/stop the ASF Tomcat servers
  - STRTCPSVR \*ASFTOMCAT  
TOMCATSVR(<my\_tomcat\_server\_name>)
  - ENDTCPSPVR \*ASFTOMCAT  
TOMCATSVR(<my\_tomcat\_server\_name>)
- ASF Tomcat servers run under the **QSYSWRK subsystem**
  - WRKACTJOB SBS(QSYSWRK)
  - Look for a job named the same as what you named the Tomcat Server

ASF Tomcat is delivered as a part of the 5722-DG1 IBM HTTP Server product

A common configuration error is the use of ports 

- One port is used by the HTTP server
- One port is used between the HTTP server and ASF Tomcat server
- Refer to the example documentation to see how each is specified

# Step by Step -- a word about Tomcat

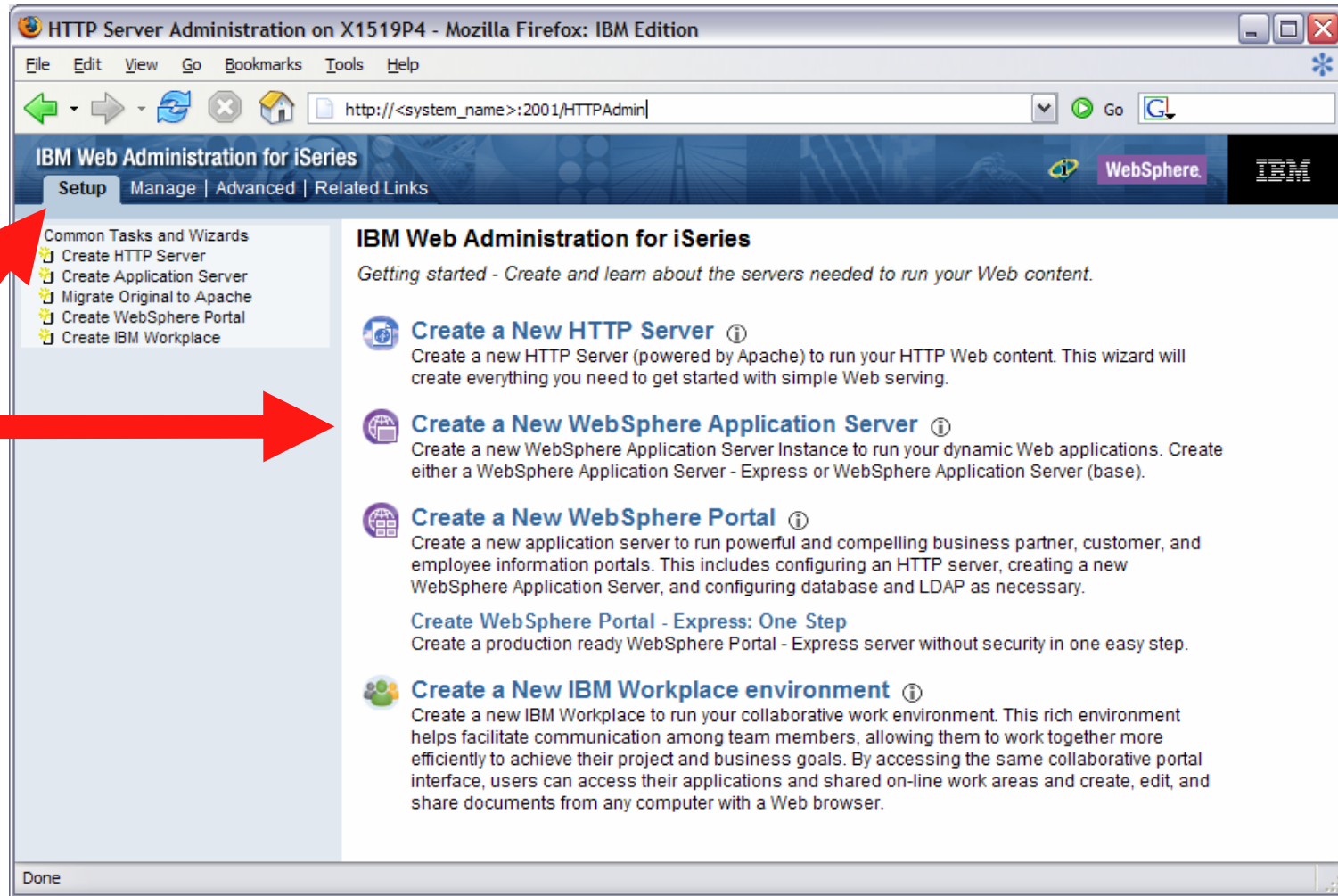
To see step-by-step instructions for configuring an ASF Tomcat instance, refer to:

- <http://www.ibm.com/systems/i/software/access/doc.html>
  - in the V5R3 table, select the link “Apache Software Foundation (ASF) Tomcat - Setup/Configuration Example ”

# Step by Step

## Setup web-serving environment (continued)

- Setup → Create a New WebSphere Application Server



The screenshot shows the IBM Web Administration for iSeries Setup page in a Mozilla Firefox browser. The browser title is "HTTP Server Administration on X1519P4 - Mozilla Firefox: IBM Edition". The address bar shows "http://<system\_name>:2001/HTTPAdmin". The page has a navigation bar with "Setup", "Manage", "Advanced", and "Related Links". A sidebar on the left lists "Common Tasks and Wizards" with options: "Create HTTP Server", "Create Application Server", "Migrate Original to Apache", "Create WebSphere Portal", and "Create IBM Workplace". A large red arrow points from the "Create Application Server" option in the sidebar to the "Create a New WebSphere Application Server" link in the main content area. The main content area is titled "IBM Web Administration for iSeries" and contains a sub-header "Getting started - Create and learn about the servers needed to run your Web content." Below this are four links with icons and descriptions: "Create a New HTTP Server", "Create a New WebSphere Application Server", "Create a New WebSphere Portal", and "Create a New IBM Workplace environment".

HTTP Server Administration on X1519P4 - Mozilla Firefox: IBM Edition

File Edit View Go Bookmarks Tools Help

http://<system\_name>:2001/HTTPAdmin

IBM Web Administration for iSeries

Setup Manage | Advanced | Related Links

Common Tasks and Wizards

- Create HTTP Server
- Create Application Server
- Migrate Original to Apache
- Create WebSphere Portal
- Create IBM Workplace

IBM Web Administration for iSeries

Getting started - Create and learn about the servers needed to run your Web content.

- Create a New HTTP Server** ⓘ  
Create a new HTTP Server (powered by Apache) to run your HTTP Web content. This wizard will create everything you need to get started with simple Web serving.
- Create a New WebSphere Application Server** ⓘ  
Create a new WebSphere Application Server Instance to run your dynamic Web applications. Create either a WebSphere Application Server - Express or WebSphere Application Server (base).
- Create a New WebSphere Portal** ⓘ  
Create a new application server to run powerful and compelling business partner, customer, and employee information portals. This includes configuring an HTTP server, creating a new WebSphere Application Server, and configuring database and LDAP as necessary.  
[Create WebSphere Portal - Express: One Step](#)  
Create a production ready WebSphere Portal - Express server without security in one easy step.
- Create a New IBM Workplace environment** ⓘ  
Create a new IBM Workplace to run your collaborative work environment. This rich environment helps facilitate communication among team members, allowing them to work together more efficiently to achieve their project and business goals. By accessing the same collaborative portal interface, users can access their applications and shared on-line work areas and create, edit, and share documents from any computer with a Web browser.

Done

# Step by Step

## Setup web-serving environment (continued)

- Click Next

The screenshot shows a web browser window titled "HTTP Server Administration on X1519P4 - Mozilla Firefox: IBM Edition". The address bar contains "http://<system\_name>:2001/HTTPAdmin". The page header includes "IBM Web Administration for iSeries" and "WebSphere". The main content area is titled "Create Application Server" and contains the following text:

Welcome to the Create Application Server wizard. This wizard creates a new application server to run Web applications with dynamic content, updates virtual host information and Web server plugin configuration for an external HTTP server of your choice, and creates all necessary JDBC providers and datasources required for the Web applications you choose to install.

- ◆ **Virtual Hosts**  
Virtual hosts are the mechanism that route the URL request from the browser to the applications. Many application servers use one virtual host to control the routing of requests. If you wish for more granular control, you can create more virtual hosts to route a particular URL to a specific application. A single virtual host can receive requests from one or more HTTP servers.
- ◆ **Install Application**  
Applications must be installed onto the application server to be accessed by your customers. The Install Application wizard will take your Enterprise Archive (EAR) or Web Archive (WAR) file that contains the application and deploy the application on the server.
- ◆ **Data Sources and JDBC Providers**  
Most applications need to access databases to retrieve and store data. JDBC providers and data sources are

At the bottom of the wizard, there are two buttons: "Next" and "Cancel". A large red arrow points to the "Next" button.

# Step by Step

## Setup web-serving environment (continued)

- Select version of WebSphere Application Server, click Next ...

HTTP Server Administration on LP016AB - Mozilla Firefox: IBM Edition

File Edit View Go Bookmarks Tools Help

http://<system\_name>:2001/HTTPAdmin

IBM Web Administration for i5/OS

Setup Manage | Advanced | Related Links

Common Tasks and Wizards

- Create HTTP Server
- Create Application Server
- Migrate Original to Apache
- Create WebSphere Portal
- Create IBM Workplace

### Create Application Server

Select WebSphere Application Server Version

Your system has more than one version of WebSphere Application Server installed.

Choose the type of application server to create

- V6.1 Express *WebSphere Application Server V6.1 Express, allows you to add dynamic function to static HTML Web pages and is intended for less complex Web applications.*
- V6.1 ND
- V6.1 Base *WebSphere Application Server Version V6.1 Express can be installed in multiple locations on this system. Multiple application servers can be created from each installation. The product install path for this installation is /QIBM/ProdData/WebSphere/AppServer/V61/Express.*
- V6.0
- V6.0 ND
- V5.1 Base
- V5.1 Express

Back Next Cancel

Done

**For remaining steps in this example, refer to  
Appendix A for: “WAS 6.1 Express Configuration  
Example”**

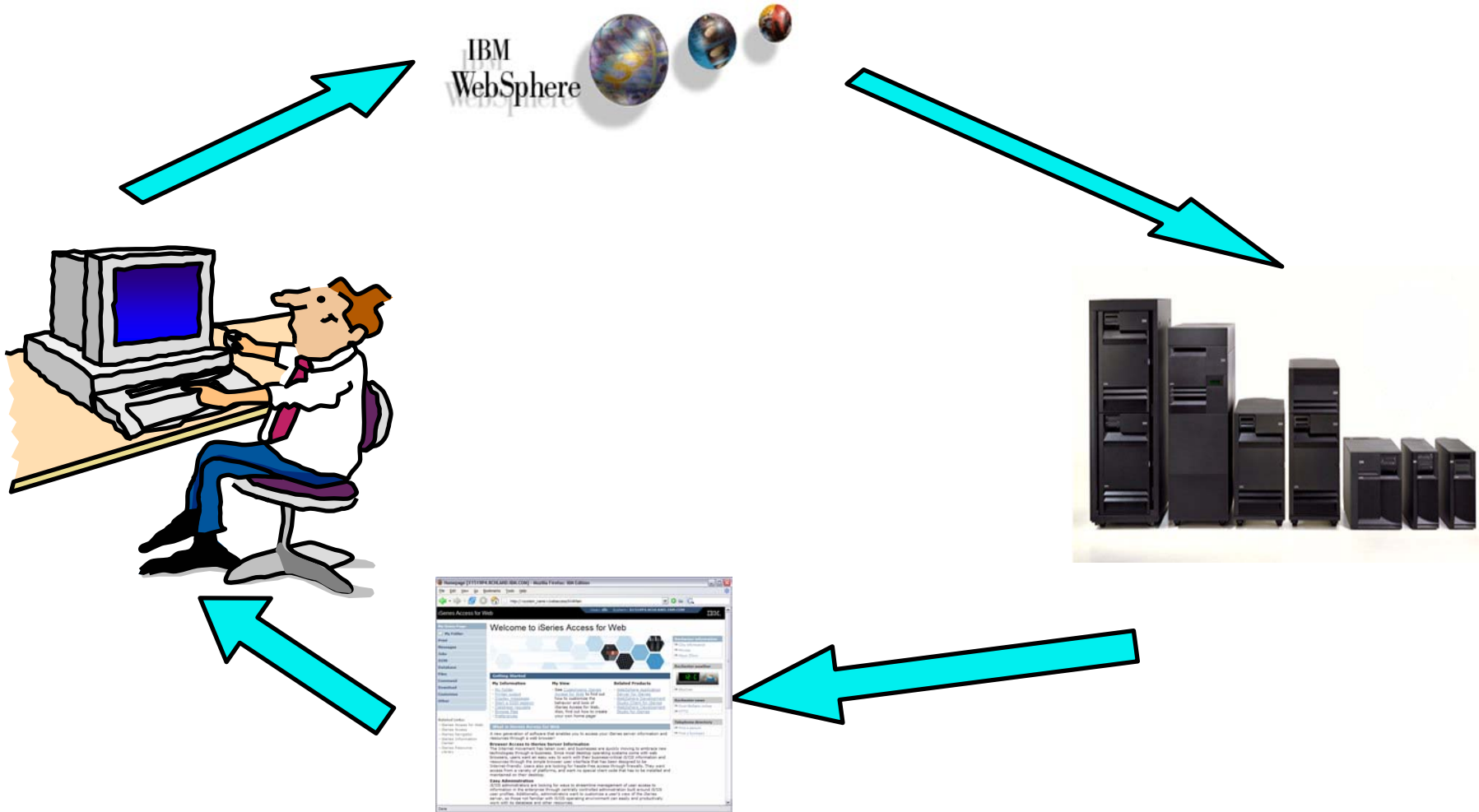


# Step by Step

## Setup web-serving environment (continued)

- Tips for managing the Web Administration for i5/OS and HTTP web servers
  - To start/stop the IBM Web Administration for i5/OS interface
    - STRTCPSVR \*HTTP HTTPSVR(\*ADMIN)
    - ENDTCPSPVR \*HTTP HTTPSVR(ADMIN)
  - To access the IBM Web Administration for i5/OS interface
    - [http://<system\\_name>:2001/HTTPAdmin](http://<system_name>:2001/HTTPAdmin)
  - Start and stop the web application server and HTTP servers from the “Manage” tab

# Configure iSeries Access for Web



# Step by Step

## Configure iSeries Access for Web

- iSeries Access for Web must be deployed (configured) to a running web application server
- iSeries Access for Web provides CL/QShell commands
  - CL commands – QIWA2 library
    - CFGACCWEB2                      Configure iSeries Access for Web
    - STRACCWEB2                     Start iSeries Access for Web
    - ENDACCWEB2                    End iSeries Access for Web
    - RMVACCWEB2                    Remove iSeries Access for Web
  - QShell - /QIBM/ProdData/Access/Web2/install
    - cfgaccweb2                      Configure iSeries Access for Web
    - straccweb2                     Start iSeries Access for Web
    - endaccweb2                    End iSeries Access for Web
    - rmvaccweb2                    Remove iSeries Access for Web
- Commands are provided to...
  - Ease the complexity of deploying a web application
  - Check dependencies
  - Invoke appropriate WebSphere tool to deploy a web application
  - Perform additional required setup
  - Setup /QIBM/UserData/Access/Web2/... structure
  - Allows for PTFs that make use of the normal i5/OS PTF tools

# Step by Step

## Configure iSeries Access for Web (continued)

- Use available documentation
  - iSeries Access for Web – V5R4 Information Center
    - Place to start to get V5R4 iSeries Access for Web installed and running
    - Examples included for each web application server environment
    - <http://www.ibm.com/systems/i/software/access/web/doc.html>
- When the commands are run
  - The WebSphere web application server must be running before running CFGACCWEB2/RMVACCWEB2
  - The WebSphere web application server will need to be restarted after CFGACCWEB2/RMVACCWEB2
  - No updates are made to the HTTP web server configuration.
- Notes
  - Do not use the web administration interface or WebSphere Admin. console to configure (deploy) or remove iSeries Access for Web
  - Do not attempt to migrate a WebSphere environment to another WebSphere environment when iSeries Access for Web is configured

# Step by Step

## Configure iSeries Access for Web (continued)

- To configure the web-serving environment created above using the CL command
  - `QIWA2/CFGACCWEB2 APPSVRTYPE(*WAS61EXP) WASPRF(iwa61express) APPSVR(iwa61express)`
- To configure the web-serving environment created above using the QSH command
  - `QSH`
  - `cd /QIBM/ProdData/Access/Web2/install`
  - `cfgaccweb2 –appsvrtype *WAS61EXP –wasprf iwa61express –appsvr iwa61express`
- Now the web-serving environment must be stop/restarted to load the configuration changes that were made for iSeries Access for Web
- Note
  - Use the help text for the commands to learn more about the command and individual parameters
    - Some help is available for the for the QSH commands
    - `cfgaccweb2 -? -help`

**Refer to Appendix B for: “Verify the installation and configuration”**

# Step by Step

Questions regarding the step-by-step option?

# Integrated Web application server

## What is it? Does iSeries 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?
  - 5722-DG1 IBM HTTP Server for i5/OS
  - Available in the DG1 group PTF
    - V5R4 SF99114 level 6 or later
    - V5R3 SF99099 level x or later
- iSeries Access for Web support
  - Only V5R4 iSeries Access for Web supports the i5/OS integrated Web application server
  - V5R4 iSeries Access for Web can be installed and is supported on...
    - V5R3 i5/OS
    - V5R4 i5/OS



# Integrated Web application server

## iSeries Access for Web within this environment

- To use iSeries Access for Web within the i5/OS integrated Web application server
  1. Stop the Web Administration for i5/OS
    - ENDTCPSPVR SERVER(\*HTTP) HTTPSPVR(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) HTTPSPVR(\*ADMIN)
  6. Start preconfigured HTTP web server
    - STRTCPSVR SERVER(\*HTTP) HTTPSPVR(IWADFT)
  7. Open a browser to iSeries Access for Web using preconfigured HTTP:port
    - [http://<system\\_name>:2020/webaccess/iWAMain](http://<system_name>:2020/webaccess/iWAMain)
  8. Done!

# Integrated Web application server

Questions regarding the integrated  
Web application server option?

# Summary

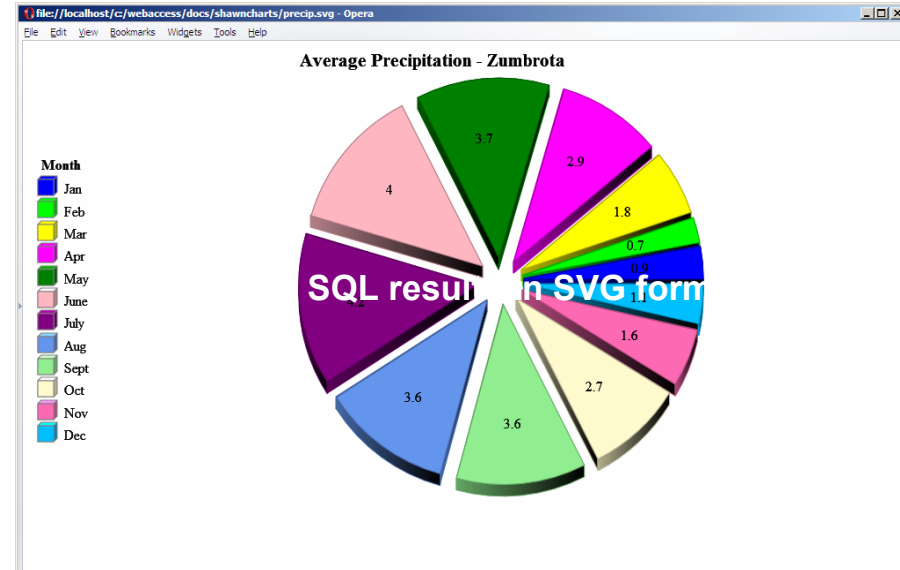


## V5R4 iSeries Access for Web Enhancements

Both Servlets and Portlets	Servlets	Portlets
<p><b>Authentication</b></p> <ul style="list-style-type: none"> <li>• Support Single sign-on (SSO) using WAS security model (EIM, LDAP)</li> <li>• 5250 Bypass i5/OS sign-on screen</li> </ul> <p><b>Database</b></p> <ul style="list-style-type: none"> <li>• Support for OpenOffice Spreadsheet format (.ods)</li> </ul> <p><b>5250</b></p> <ul style="list-style-type: none"> <li>• Support DDS HTML keywords</li> <li>• Display HTTP/HTTPS URL strings as links</li> </ul>	<p><b>Database</b></p> <ul style="list-style-type: none"> <li>• Import/run DB2 Query Manager and IBM Query for iSeries queries</li> <li>• A new output destination of IFS for SQL requests</li> <li>• New option of 'Find' on Tables link</li> </ul> <p><b>Administration</b></p> <ul style="list-style-type: none"> <li>• Can transfer configuration items between i5/OS user profiles</li> <li>• Can use WebSphere data source names for database connections</li> </ul> <p><b>Files</b></p> <ul style="list-style-type: none"> <li>• Browse File Share link added</li> </ul>	<p><b>Database</b></p> <ul style="list-style-type: none"> <li>• iSeries SQL Requests added</li> <li>• iSeries SQL Results Viewer added</li> </ul> <p><b>Files</b></p> <ul style="list-style-type: none"> <li>• Zip function added</li> </ul> <p><b>iSeries Credentials</b></p> <ul style="list-style-type: none"> <li>• Can change i5/OS password via Access for Web</li> </ul>

# What's coming?

- **System i Access for Web**
  - Single sign-on: WAS and Access for Web support authentication using Windows domain login
  - SQL wizard supports joins of multiple tables
  - Chart SQL results in Scalable Vector Graphics (SVG) format
  - Automation and scheduling of Access for Web tasks
  - JSR 168 Portlets



# Why use iSeries 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
  - ▶ iSeries 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 e-  
business*



*Use 'out of  
the box'*

IBM  
WebSphere



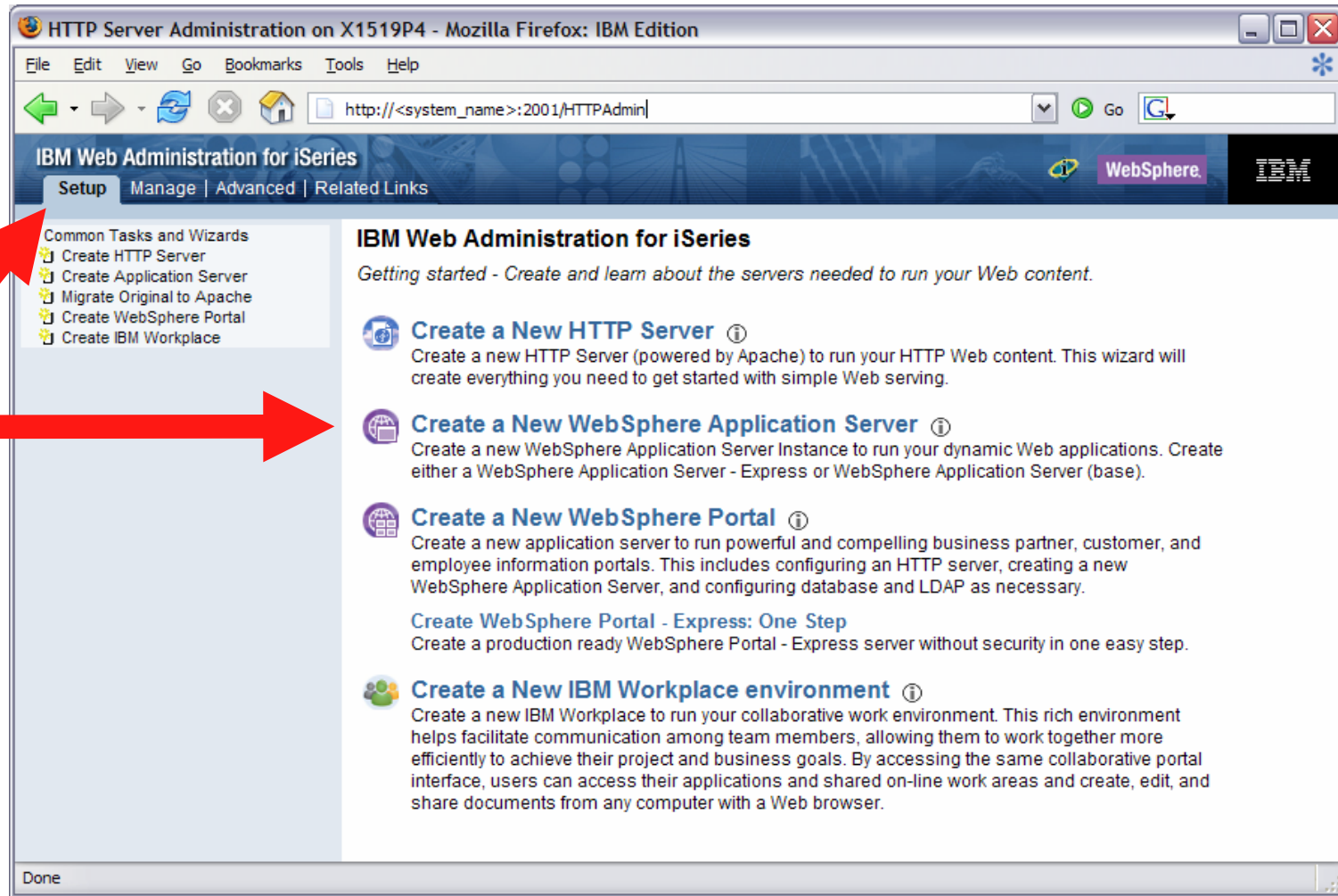
## Appendix A: WAS 6.1 Express Configuration Example



# Step by Step

## Setup web-serving environment

- **Setup → Create a New WebSphere Application Server**
  - start at `http://<your_system>:2001/HTTPAdmin`





# Step by Step

## Setup web-serving environment (continued)

- Click Next

The screenshot shows a web browser window titled "HTTP Server Administration on X1519P4 - Mozilla Firefox: IBM Edition". The address bar shows "http://<system\_name>:2001/HTTPAdmin". The page header includes "IBM Web Administration for iSeries" and "WebSphere". The left sidebar lists "Common Tasks and Wizards" with options like "Create HTTP Server" and "Create Application Server". The main content area is titled "Create Application Server" and contains the following text:

Welcome to the Create Application Server wizard. This wizard creates a new application server to run Web applications with dynamic content, updates virtual host information and Web server plugin configuration for an external HTTP server of your choice, and creates all necessary JDBC providers and datasources required for the Web applications you choose to install.

- ◆ **Virtual Hosts**  
Virtual hosts are the mechanism that route the URL request from the browser to the applications. Many application servers use one virtual host to control the routing of requests. If you wish for more granular control, you can create more virtual hosts to route a particular URL to a specific application. A single virtual host can receive requests from one or more HTTP servers.
- ◆ **Install Application**  
Applications must be installed onto the application server to be accessed by your customers. The Install Application wizard will take your Enterprise Archive (EAR) or Web Archive (WAR) file that contains the application and deploy the application on the server.
- ◆ **Data Sources and JDBC Providers**  
Most applications need to access databases to retrieve and store data. JDBC providers and data sources are

At the bottom of the wizard, there are "Next" and "Cancel" buttons. A large red arrow points to the "Next" button.

# Step by Step

## Setup web-serving environment (continued)

- Select version of WebSphere Application Server, click Next

HTTP Server Administration on LP016AB - Mozilla Firefox: IBM Edition

File Edit View Go Bookmarks Tools Help

http://<system\_name>:2001/HTTPAdmin

IBM Web Administration for i5/OS

Setup Manage | Advanced | Related Links

Common Tasks and Wizards

- Create HTTP Server
- Create Application Server
- Migrate Original to Apache
- Create WebSphere Portal
- Create IBM Workplace

### Create Application Server

Select WebSphere Application Server Version

Your system has more than one version of WebSphere Application Server installed.

Choose the type of application server to create

- V6.1 Express *WebSphere Application Server V6.1 Express, allows you to add dynamic function to static HTML Web pages and is intended for less complex Web applications.*
- V6.1 ND
- V6.1 Base *WebSphere Application Server Version V6.1 Express can be installed in multiple locations on this system. Multiple application servers can be created from each installation. The product install path for this installation is /QIBM/ProdData/WebSphere/AppServer/V61/Express.*
- V6.0
- V6.0 ND
- V5.1 Base
- V5.1 Express

Back Next Cancel

Done

# Step by Step

## Setup web-serving environment (continued)

- Enter a name for the web application server, optionally a description, click Next

The screenshot shows the 'Create WebSphere Application Server - Express, V6.1' wizard in a Mozilla Firefox browser window. The browser title is 'HTTP Server Administration on LP016AB - Mozilla Firefox: IBM Edition'. The address bar shows 'http://<system\_name>:2001/HTTPAdmin'. The page header includes 'IBM Web Administration for i5/OS' and 'WebSphere' branding. The left sidebar lists 'Common Tasks and Wizards' with options like 'Create HTTP Server', 'Create Application Server', 'Migrate Original to Apache', 'Create WebSphere Portal', and 'Create IBM Workplace'. The main content area is titled 'Create WebSphere Application Server - Express, V6.1' and contains the instruction 'Specify Application Server Name'. Below this, there is a text input field for 'Application server name' containing 'iwa61express' and another text input field for 'Server description' containing 'System i Access for Web'. A red arrow points to the 'Application server name' field. At the bottom of the form are 'Back', 'Next', and 'Cancel' buttons. The status bar at the bottom left shows 'Done'.

# Step by Step

## Setup web-serving environment (continued)

- Select Create a new HTTP server, click Next

The screenshot shows a web browser window titled "HTTP Server Administration on LP016AB - Mozilla Firefox: IBM Edition". The address bar shows "http://<system\_name>:2001/HTTPAdmin". The page header includes "IBM Web Administration for i5/OS" and "WebSphere" branding. The main content area is titled "Create WebSphere Application Server - Express, V6.1" and contains the following text:

Select HTTP Server Type

The application server may be associated with an external HTTP server. If selected, the wizard will set up the external HTTP server with the necessary information to route incoming URL requests to this application server.

Choose the HTTP server type: ?

- Create a new HTTP server (powered by Apache)
- Select an existing HTTP server (powered by Apache)
- Select an existing Domino HTTP server
- Do not associate an external HTTP server with this application server

At the bottom of the page, there are "Back", "Next", and "Cancel" buttons. A red arrow points to the "Create a new HTTP server (powered by Apache)" radio button.

# Step by Step

## Setup web-serving environment (continued)

- Enter name for HTTP server, optionally description, port for this HTTP web server, click Next

HTTP Server Administration on LP016AB - Mozilla Firefox: IBM Edition

File Edit View Go Bookmarks Tools Help

http://<system\_name>:2001/HTTPAdmin

IBM Web Administration for i5/OS

Setup Manage | Advanced | Related Links

Common Tasks and Wizards

- Create HTTP Server
- Create Application Server
- Migrate Original to Apache
- Create WebSphere Portal
- Create IBM Workplace

### Create WebSphere Application Server - Express, V6.1

Create a new HTTP server (powered by Apache)

A new HTTP server (powered by Apache) will be created and configured to be used by this application server. ?

HTTP server name:

HTTP server description:

Your HTTP server may listen for requests on a specific IP address or on all IP addresses of the system.

On which IP address and TCP port would you like your HTTP server to listen?

IP address:

Port:

**Note:** Most browsers make requests to port 80 by default.

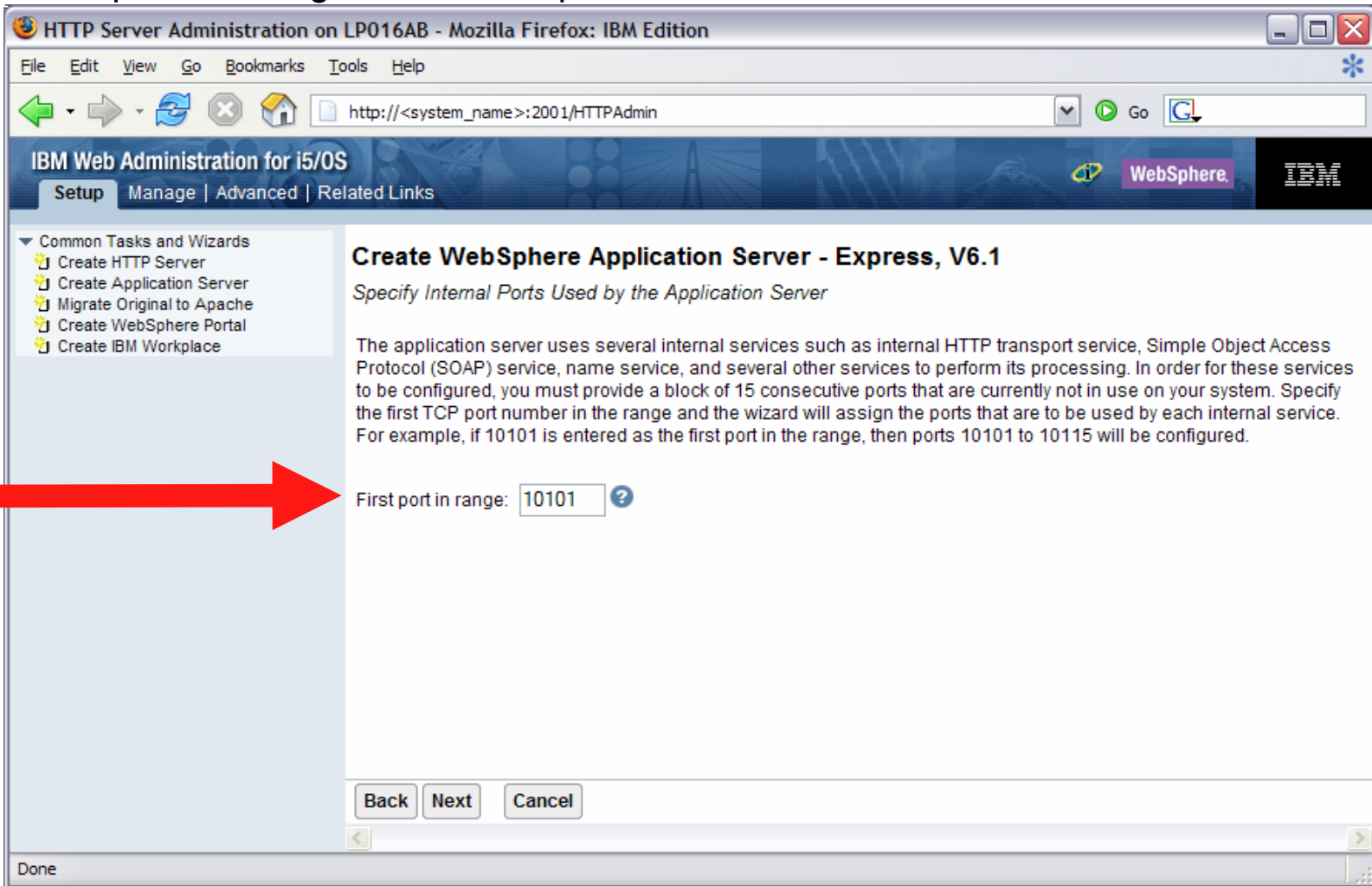
Back Next Cancel

Done

# Step by Step

## Setup web-serving environment (continued)

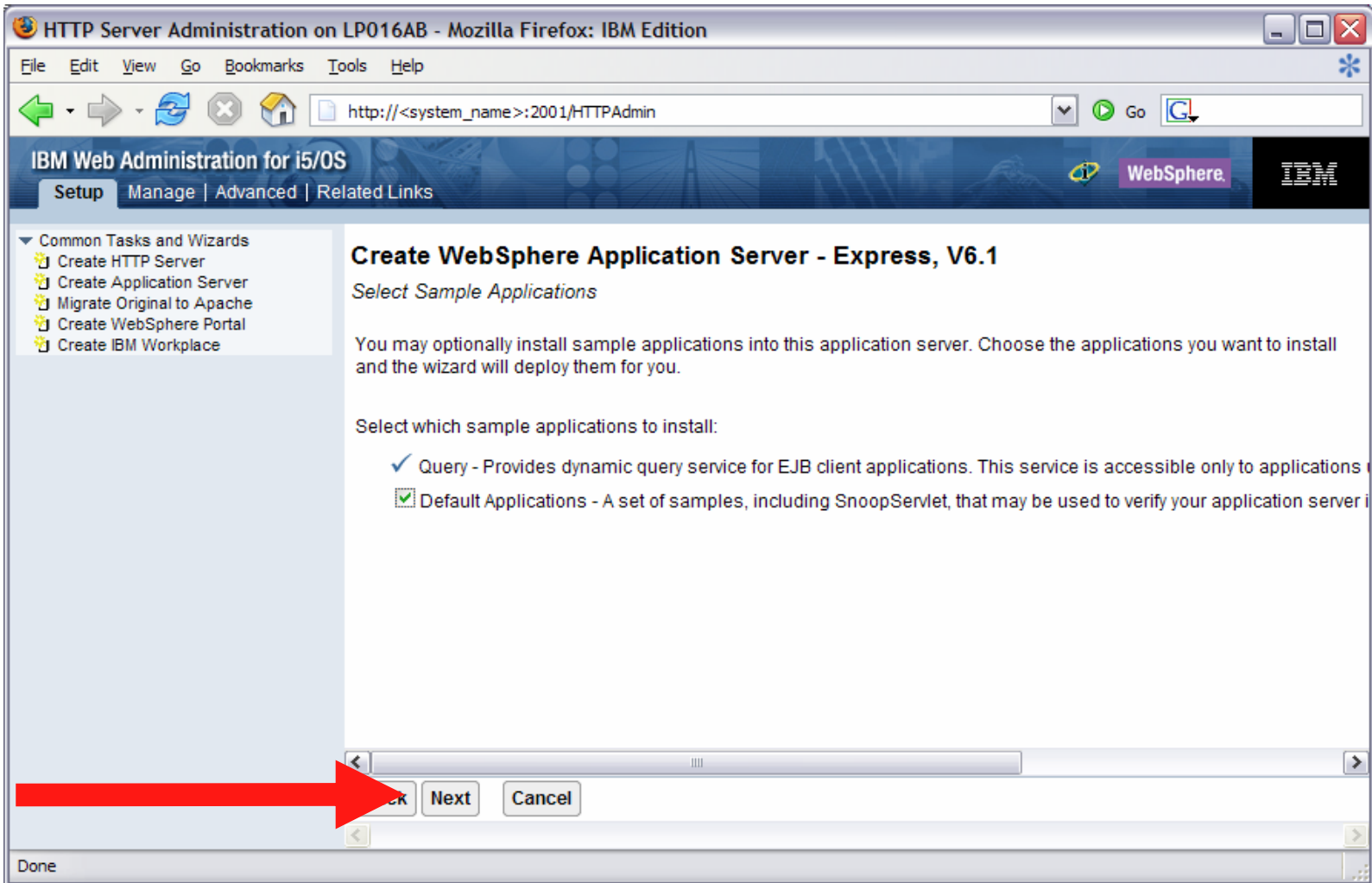
- Enter first port in a range of available ports, click Next



# Step by Step

## Setup web-serving environment (continued)

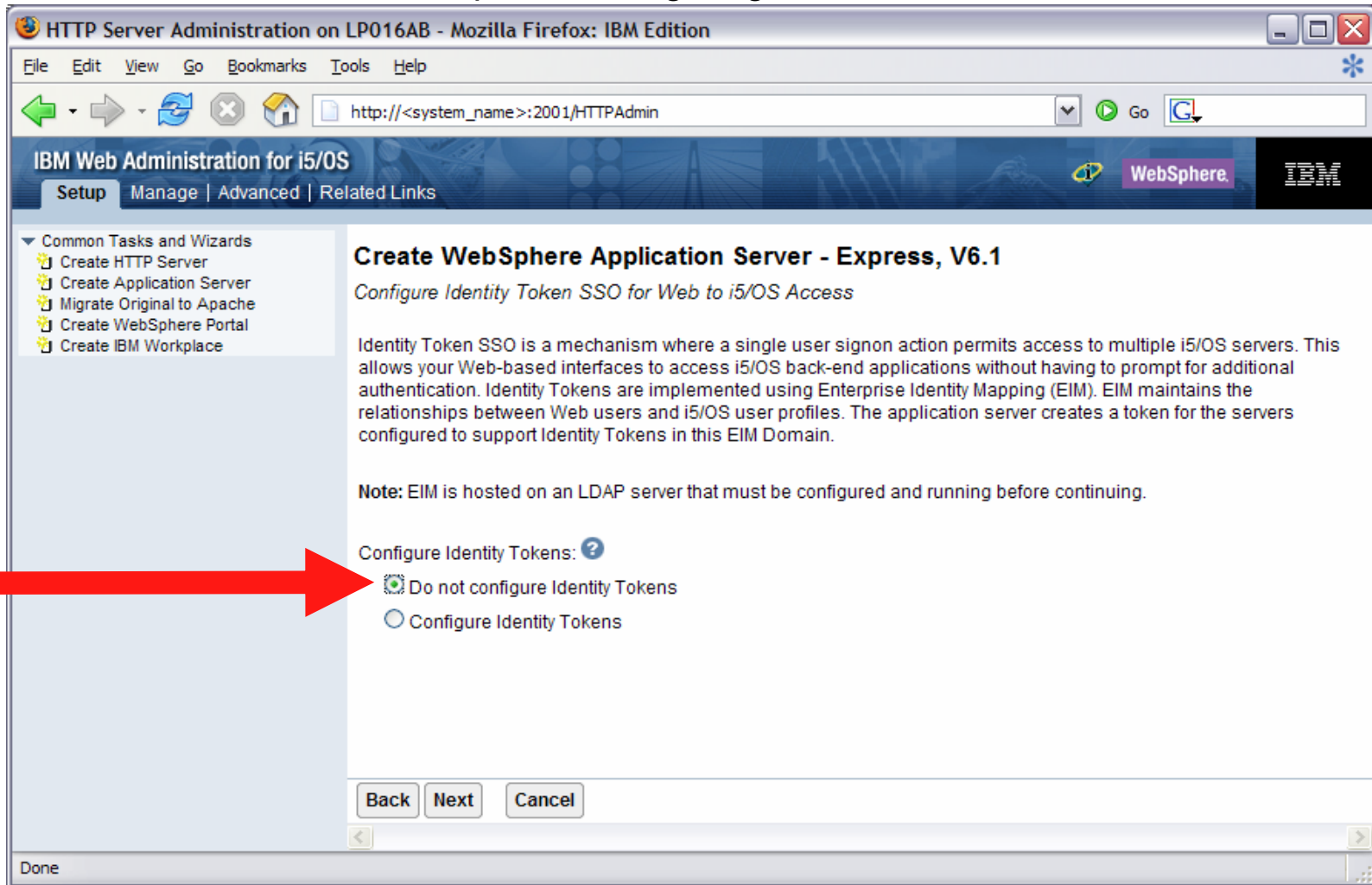
- Click Next



# Step by Step

## Setup web-serving environment (continued)

- Information Center has an example for configuring SSO environment





# Step by Step

## Setup web-serving environment (continued)

- Click Finish to create the web-serving environment

The screenshot shows the 'Create WebSphere Application Server - Express, V6.1' wizard in the IBM Web Administration console. The interface includes a navigation pane on the left with 'Common Tasks and Wizards' such as 'Create HTTP Server' and 'Create Application Server'. The main content area displays a 'Summary' section with the following details:

- WAS version: 6.1.0.3 Express
- Application server name: iwa61express
- Server description: System i Access for Web
- Internal port range: 10101 - 10115
- Virtual host: default\_host
- Profile root: /QIBM/UserData/WebSphere/AppServer/V61/Express/profiles
- External HTTP server association: IWA61EXPRE
- Server URL: http://LP016AB:10100
- Business applications: None
- Sample applications:

Application name	URL to access application
query	Used by EJB client applications
Default Applications	http://LP016AB:10100/snoop
	http://LP016AB:10100/hitcount
	http://LP016AB:10100/hello

A red arrow points to the 'Finish' button at the bottom of the wizard. Other buttons include 'Cancel' and 'Printable Summary'. A 'Note' at the bottom states: 'To access the application(s) you have chosen, start both the application server and HTTP server, then enter a URL from the table above.'

# Step by Step

## Setup web-serving environment (continued)

- Page refreshes to Application Servers tab, status of Creating...

The screenshot shows the IBM Web Administration for i5/OS interface in Mozilla Firefox. The browser address bar shows `http://<system_name>:2001/HTTPAdmin`. The main navigation bar includes 'Setup', 'Manage', 'Advanced', and 'Related Links'. Below this, there are tabs for 'All Servers', 'HTTP Servers', 'Application Servers', and 'AS400 Tomcat Servers'. The 'Application Servers' tab is active, and a red arrow points to it. Underneath, there is a 'Creating' status indicator with a refresh icon, and a dropdown menu showing 'Server: iwa61express/iwa61express - V6.1 Express'. Another red arrow points to the 'Creating' status. On the left, a sidebar lists 'Common Tasks and Wizards' including 'Create HTTP Server', 'Create Application Server', 'Migrate Original to Apache', 'Create WebSphere Portal', and 'Create IBM Workplace'. The main content area displays 'Manage WebSphere Application Server - V6.1.0.3 Express' with details: 'Profile: iwa61express', 'Server: iwa61express', and 'Product install path: /QIBM/ProdData/WebSphere/AppServer/V61/Express'. A message box states: 'Server "iwa61express/iwa61express" is in the process of being created. To update the status, click the Refresh icon above.' At the bottom, there are three steps: 'Create Additional Virtual Host', 'Install New Application', and 'Create Data Source', each with a brief description.

# Step by Step

## Setup web-serving environment (continued)

- Environment is created when status reaches Stopped, Click start icon to start

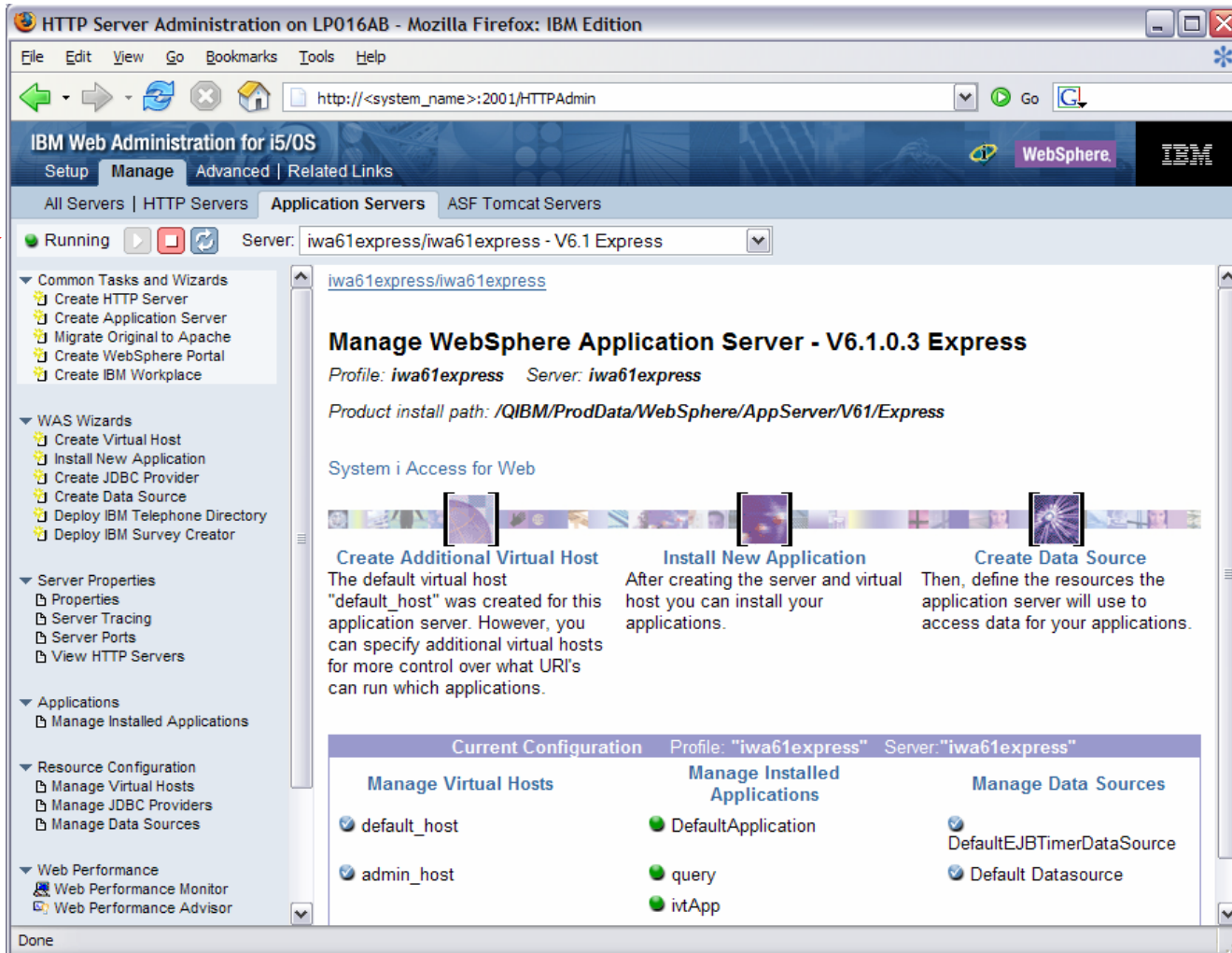
The screenshot shows the IBM Web Administration for i5/OS interface in Mozilla Firefox. The browser address bar shows `http://<system_name>:2001/HTTPAdmin`. The page title is "HTTP Server Administration on LP016AB - Mozilla Firefox: IBM Edition". The main navigation bar includes "Setup", "Manage", and "Advanced | Related Links". Below this, there are tabs for "All Servers | HTTP Servers | Application Servers | ASF Tomcat Servers". The current server is identified as "iwa61express/iwa61express - V6.1 Express" and its status is "Stopped". A red arrow points to the green play button (start icon) next to the status. The left sidebar contains a tree view with categories like "Common Tasks and Wizards", "WAS Wizards", "Server Properties", "Applications", "Resource Configuration", and "Web Performance". The main content area displays "Manage WebSphere Application Server - V6.1.0.3 Express" with details for profile "iwa61express" and server "iwa61express". Below this, there are three sections: "Create Additional Virtual Host", "Install New Application", and "Create Data Source". At the bottom, a table shows the current configuration for the selected server.

Current Configuration	Profile: "iwa61express"	Server: "iwa61express"
<b>Manage Virtual Hosts</b> <ul style="list-style-type: none"><li>default_host</li><li>admin_host</li></ul>	<b>Manage Installed Applications</b> <ul style="list-style-type: none"><li>DefaultApplication</li><li>query</li><li>ivtApp</li></ul>	<b>Manage Data Sources</b> <ul style="list-style-type: none"><li>DefaultEJBTimerDataSource</li><li>Default Datasource</li></ul>

# Step by Step

## Setup web-serving environment (continued)

- Environment is ready for use when status reaches Running. Next you can configure iSeries Access for Web



The screenshot shows the IBM Web Administration for i5/OS interface in Mozilla Firefox. The browser address bar shows `http://<system_name>:2001/HTTPAdmin`. The page title is "Manage WebSphere Application Server - V6.1.0.3 Express". The status is "Running". The server is identified as "iwa61express/iwa61express - V6.1 Express". The profile is "iwa61express" and the server is "iwa61express". The product install path is `/QIBM/ProdData/WebSphere/AppServer/V61/Express`.

The interface includes a left-hand navigation pane with sections like "Common Tasks and Wizards", "WAS Wizards", "Server Properties", "Applications", "Resource Configuration", and "Web Performance". A red arrow points to the "Running" status indicator in the top left of the main content area.

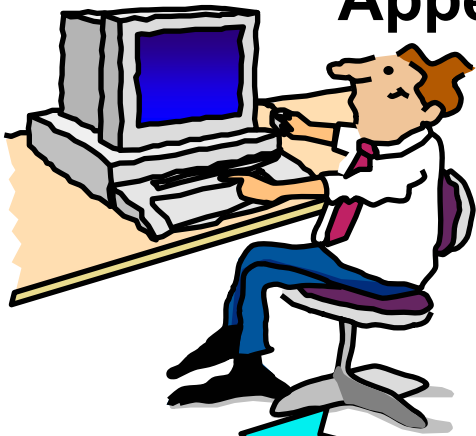
The main content area displays "System i Access for Web" with three steps: "Create Additional Virtual Host", "Install New Application", and "Create Data Source". Below this, there is a table showing the current configuration for the server.

Current Configuration	Profile: "iwa61express"	Server: "iwa61express"
<b>Manage Virtual Hosts</b>	<b>Manage Installed Applications</b>	<b>Manage Data Sources</b>
<input checked="" type="checkbox"/> default_host	<input checked="" type="checkbox"/> DefaultApplication	<input checked="" type="checkbox"/> DefaultEJBTimerDataSource
<input checked="" type="checkbox"/> admin_host	<input checked="" type="checkbox"/> query	<input checked="" type="checkbox"/> Default Datasource
	<input checked="" type="checkbox"/> ivtApp	

IBM  
WebSphere



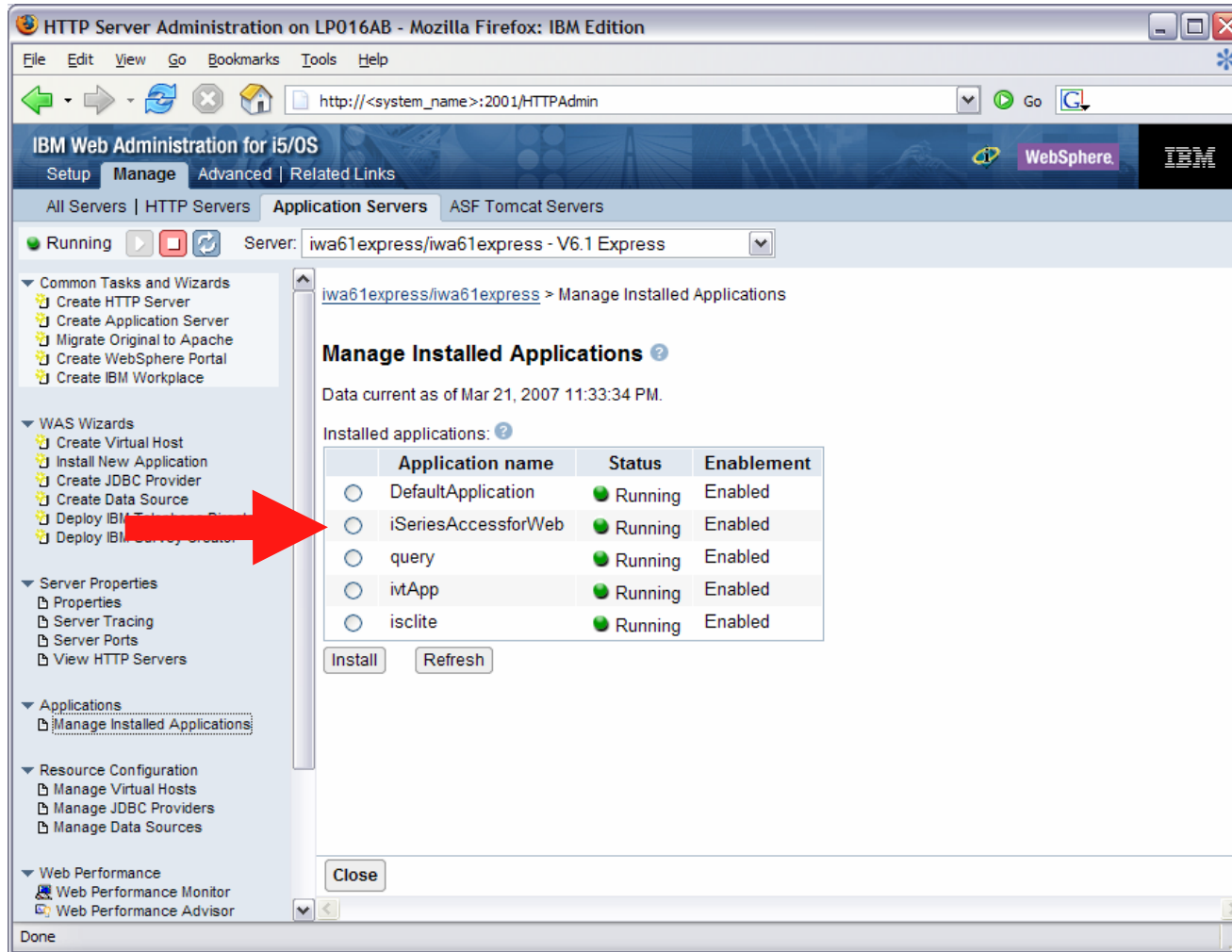
## Appendix B: Verify the installation and configuration



# Step by Step

## Verify the installation and configuration

- IBM Web Administration for i5/OS → Applications → Manage Installed Applications



The screenshot shows the IBM Web Administration for i5/OS interface. The browser title is "HTTP Server Administration on LP016AB - Mozilla Firefox: IBM Edition". The address bar shows "http://<system\_name>:2001/HTTPAdmin". The main navigation bar includes "Setup", "Manage", "Advanced", and "Related Links". The "Manage" tab is active, and the "Application Servers" section is selected. The server name is "iwa61express/iwa61express - V6.1 Express". The left sidebar contains a tree view with categories like "Common Tasks and Wizards", "WAS Wizards", "Server Properties", "Applications", "Resource Configuration", and "Web Performance". The "Applications" category is expanded, and "Manage Installed Applications" is selected. The main content area displays "Manage Installed Applications" with a table of installed applications. A red arrow points to the "Manage Installed Applications" link in the sidebar.

**Manage Installed Applications** ?

Data current as of Mar 21, 2007 11:33:34 PM.

Installed applications: ?

	Application name	Status	Enablement
<input type="radio"/>	DefaultApplication	Running	Enabled
<input type="radio"/>	iSeriesAccessforWeb	Running	Enabled
<input type="radio"/>	query	Running	Enabled
<input type="radio"/>	ivtApp	Running	Enabled
<input type="radio"/>	isclite	Running	Enabled

Install Refresh

Close

# Step by Step

## Verify the installation and configuration (continued)

- HTTP Server
  - Verify several jobs are running with the name of your HTTP server
    - WRKACTJOB SBS(QHTTPSVR)
  
- WebSphere Application Server
  - Verify the application server is running
    - WRKACTJOB SBS(QWAS61)                      V6.1 - WAS for i5/OS
    - WRKACTJOB SBS(QWAS6)                      V6.0 - WAS for OS/400
  
- iSeries Access for Web
  - Open browser to `http://<system_name>:<port>/webaccess/iWAHome`
  - Open browser to `http://<system_name>:<port>/webaccess/iWAMain`

# Step by Step

## Verify the installation and configuration (continued)

- When things do not work
  - Verify the HTTP server is running
  - Verify the WebSphere application server was restarted after running CFGACCWEB2
  - Verify the WebSphere application server running
  - That you have the latest group PTFs for the HTTP server and WebSphere Application Server.
  - That iSeries Access for Web is listed as an installed application in the WebSphere application server (via the IBM Web Administration for i5/OS interface)
  - iSeries Access for Web logs
    - /QIBM/UserData/Access/Web2/logs/cmds.log High level translated log
    - /QIBM/UserData/Access/Web2/logs/cmdstrace.log Low level untranslated log
    - /QIBM/UserData/Access/Web2/logs/<appsvrtype>/<wasprf>/<appsvr>/logs/\*
      - Logs for specific WAS servers. Note: some logs may be EBCDIC requiring use of **WRKLNK** i5/OS command to view them



# Step by Step

## Verify the installation and configuration (continued)

- When things do not work
  - WAS V6.1 - Express
    - /QIBM/UserData/WebSphere/AppServer/V61/Express/profiles/<profile\_name>/logs/wsadmin.traceout
    - /QIBM/UserData/WebSphere/AppServer/V61/Express/profiles/<profile\_name>/logs/activity.log
    - /QIBM/UserData/WebSphere/AppServer/V61/Express/profiles/<profile\_name>/logs/<app\_server\_name>/SystemOut.log
    - /QIBM/UserData/WebSphere/AppServer/V61/Express/profiles/<profile\_name>/logs/<app\_server\_name>/SystemErr.log

# Additional Information

- iSeries Access Home page:
  - <http://www.ibm.com/systems/i/software/access>
- iSeries Access for Web Home page:
  - <http://www.ibm.com/systems/i/software/access/web/>
- Demo of iSeries Access for Web:
  - <http://iseriesd.dfw.ibm.com/webaccess/iWHome>
  - Refer to this presentation for sign-on information

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