



Deep Dive Into System i Access for Web Session 2:

Configuration and Controlling Access

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

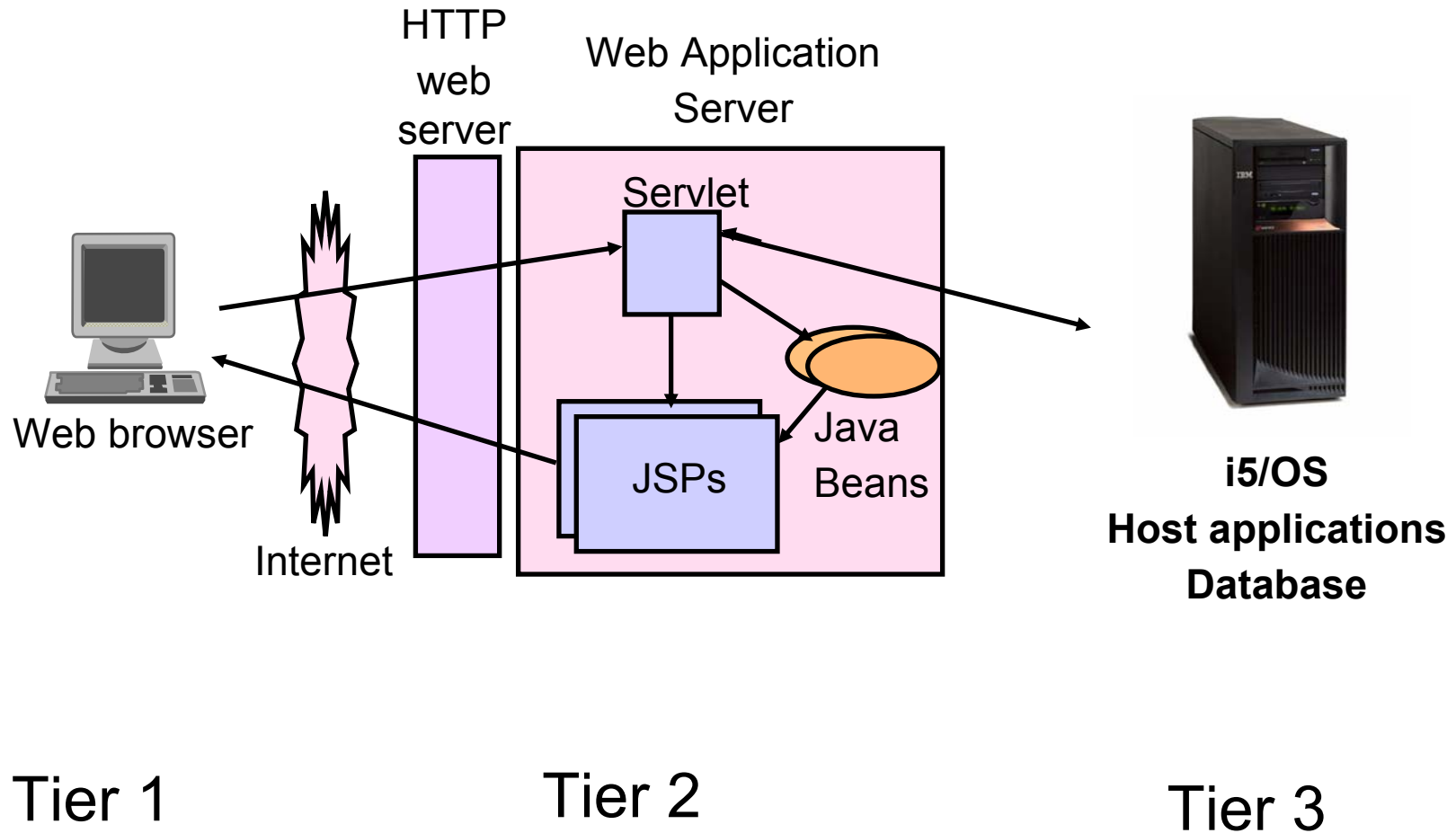
Agenda

- Part 1: Installation and Configuration
 - Hardware and software requirements
 - Supported web serving environments
 - Configuration steps

- Part 2: Runtime Considerations
 - Use of policies
 - Customizing the home page/template files

Part 1: Installation and Configuration

First you need a web-serving environment



Pieces of the web-serving environment

- HTTP Server (powered by Apache)
 - Front door for your system into your web serving environment
 - HTTP/HTTPS (SSL)
 - Listens for web requests on a specific TCP/IP port
 - Routes web requests between an end-user browser and a web application sever
- Web application server
 - WebSphere Application Server
 - Integrated Web application server
 - Provides a java virtual machine environment where web applications run
- Web application
 - System i Access for Web
 - Provides specific function that users access using a web browser
 - Deployed/installed within a web application server
- WebSphere Portal/Workplace
 - Web application deployed to WebSphere Application Server
 - Provides environment in which portlets are deployed and run.

Supported Web Application Servers

System i Access for Web **servlet** code can be used with any of the following web application servers:

V6R1 System i Access for Web

- Integrated Web application server
- WebSphere® Application Server V6.1 and V6.0 – Express for i5/OS
- WebSphere Application Server V6.1 and 6.0 Base and Network Deployment

V5R4 System i Access for Web

- Integrated Web application server
- WebSphere® Application Server V6.1 and V6.0 – Express for i5/OS
- WebSphere Application Server V6.1 and 6.0 Base and Network Deployment
- WebSphere Application Server V5.1 - Express for iSeries
- WebSphere Application Server V5.0 - Express
- WebSphere Application Server V5.1 and 5.0 Base and Network Deployment Editions
- ASF Tomcat

System i Access for Web **portlet** code can be used with any of the following portal servers.

V6R1 System i Access for Web

- WebSphere Portal for Multiplatforms V6.0
- WebSphere Portal for Multiplatforms V5.1.0.1

V5R4 System i Access for Web

- 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

Performance...???

- Does running System i Access for Web affect performance?
 - Products like System i Access for Web don't put much load on i5/OS...
- How does the web application server affect performance?
 - If you have an older, under-powered System i, then performance may not be good...if you have a newer, bigger System i, then performance won't be an issue (unless you already are running your System i at maximum capacity).
 - Use the **IBM Systems Workload Estimator** to see what performance will be if WAS is added to your System i at: <http://www-912.ibm.com/wle/EstimatorServlet>
 - There is a Workload Estimator for **WebFacing** Workloads. System i Access for Web will be similar (depending on what functions of System i Access for Web are being used).
- Fine-tuning your web application server
 - If performance is not as good as expected, look in the WebSphere Information Center
 - <http://publib.boulder.ibm.com/infocenter/wasinfo/v6r1/index.jsp?topic=/com.ibm.websphere.base.iseries.doc/info/iseri/ae/welc6topinstalling.html>

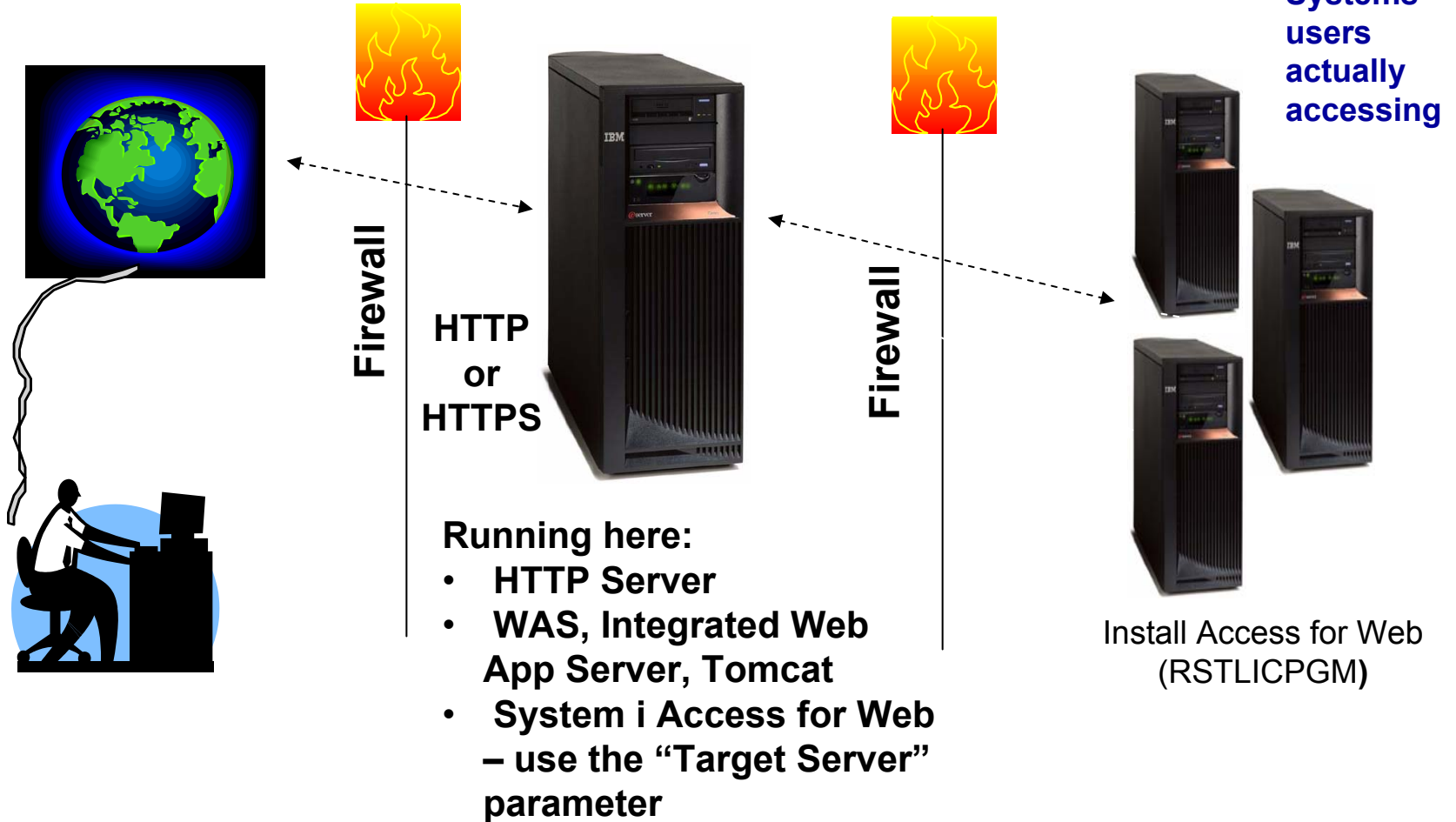
Performance Considerations...

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

The screenshot shows the IBM Systems Workload Estimator web application running in Mozilla Firefox. The browser window title is "IBM Systems Workload Estimator - Mozilla Firefox: IBM Edition". The address bar shows the URL "http://www-912.ibm.com/wle/EstimatorServlet". The page features the IBM logo and a search bar. The navigation menu includes "Home", "Products", "Services & solutions", "Support & downloads", and "My account". The version information is "Version: 2007.1.fx.3 28-Mar-07 www-912". The main content area is titled "IBM Systems Workload Estimator" and has two tabs: "Workload Selection" and "Help/Tutorials". Under "Workload Selection", there are several options: "New System i estimation", "Options", "Tier: Add, Move, Delete", "New System p estimation", "Restore Saved Estimation", "System: Add, Move, Delete", "New System x estimation", "Edit Estimation Info", "Partition: Add, Move, Delete", and "Workload: Add, Move, Delete". Below this, a text block states: "Shown below is the structure of the current estimation. Use the options shown in the tabs above to modify the structure of this estimation." The structure is displayed as a tree view: "MySolution" (folder) contains "Tier #1 System i" (folder), which contains "System #1 (1 interval defined)" (folder), which contains "Partition: Main #1, i5/OS™ - V5R4, No LPAR" (folder). A "Continue" button is visible below the tree view. The footer includes "About IBM", "Privacy", and "Contact" links, and the status bar shows "Done".

Setting up your web application server

DMZ = demilitarized zone



Only need to set up 1 web application server

Port Requirements Comparison

System i Access for Windows (5722-XE1)* (5761-XE1)

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

System i Access for Web (5722-XH2) (5761-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**

Hardware/Software Requirements



Client Browser Requirements

- These browsers have been tested with **V6R1** System i Access for Web:
 - Firefox 2.0 (Windows® and Linux®)
 - Internet Explorer 6.0 with Service Pack 1 (Windows)
 - Internet Explorer 7.0 (Windows)
 - Mozilla 1.7 (Windows, Linux, and AIX®)
 - Opera 9.2 (Windows and Linux)
- These browsers have been tested with **V5R4** System i 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 System i Access for Web.

• Set browser to allow 'Cookies'

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

i5/OS Software Requirements

Product Number	Product Name	Option	\$
5722-SS1 5761-SS1	V5R4 System i Access for Web: V5R3 or V5R4 i5/OS V6R1 System i Access for Web: V5R4 or V6R1 i5/OS	Base	w/HW
57xx-SS1	i5/OS - Extended Base Directory Support	3	N/C
57xx-SS1	i5/OS - AFP Compatibility Fonts	8	N/C
57xx-SS1	i5/OS - Host Servers	12	N/C
57xx-SS1	i5/OS QShell Interpreter	30	N/C
57xx-SS1	If you plan to use Secure Sockets Layer (SSL)... • i5/OS Digital Certificate Manager • Cryptographic Service Provider	34 35	N/C N/C
57xx-DG1	IBM HTTP Server for iSeries	Base	N/C
57xx-JV1	Developer Kit for Java Developer Kit for Java Version 1.3 Developer Kit for Java Version 1.4 Developer Kit for Java Version 5.0 J2SE 5.0 32 bit (Check WebSphere doc for required version)	Base 5 6 7 8	N/C N/C N/C N/C
57xx-JC1	Toolbox for Java	Base	N/C
57xx-TC1	TCP/IP Connectivity Utilities for iSeries	Base	N/C



Note: xx = "22" for V5R4, "61" for V6R1

i5/OS Software Requirements (continued)

Product Number	Product Name	Option	\$
57xx-XW1	System i Access Family	Base	\$
57xx-XH2	System i Access for Web <ul style="list-style-type: none"> • Ships with 57xx-XW1 iSeries Access Family • V5R4 System i Access for Web runs on i5/OS V5R3 and V5R4 • V6R1 System i Access for Web runs on i5/OS V5R4 and V6R1 	Base	part of XW1
5722-IP1	IBM Info Print Server (<u>Optional</u> -- enables best PDF output but <u>is not</u> required to view PDF output)	Base	\$

Note: xx = "22" for V5R4, "61" for V6R1

i5/OS Software Requirements (continued)

Product Number	Product Name	Option	\$
5733-W61 5733-W60 5722-E51 5733-W51 5722-IWE 5733-WS5	<p><u>One, or more, of the following web servers</u></p> <ul style="list-style-type: none"> • WebSphere Application Server V6.1 for i5/OS (all three editions) • WebSphere Application Server V6.0 for OS/400 (all three editions) • WebSphere Application Server V5.1 - Express for iSeries • WebSphere Application Server V5.1 for iSeries (Base and ND) • WebSphere Application Server V5.0 - Express for iSeries • WebSphere Application Server V5.0 for iSeries (Base and ND) 	See documentation	
57xx-DG1	<ul style="list-style-type: none"> • integrated Web application server • Apache Software Foundation Tomcat 		
*	• WebSphere Portal for iSeries (Express and Express Plus) V5.0.2.2		
*	• WebSphere Portal Enable for Multiplatforms V5.1.0.1		
*	• WebSphere Portal V6.0		
*	• IBM Workplace Services Express V2.5, V2.6		

Note: xx = "22" for V5R4, "61" for V6R1

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

- WebSphere <http://www.ibm.com/systems/i/software/websphere/index.html/>
- 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>
- ASF Tomcat <http://www.ibm.com/systems/i/software/http/index.html/>

System i Hardware Requirements

Models/Processor features/Memory

Refer to the web application server documentation to determine what server models, processor features, and the memory requirements are for your web serving environment

- WebSphere Application Server
 - <http://www.ibm.com/systems/i/software/websphere/index.html/>
- ASF Tomcat
 - <http://www.ibm.com/systems/i/software/http/index.html/>
- WebSphere Portal Express/Express Plus for iSeries V5.0.2.2
 - <http://publib.boulder.ibm.com/pvc/wp/502/smbi/en/InfoCenter/index.html>
- WebSphere Portal V5.1.0.1
 - <http://publib.boulder.ibm.com/infocenter/wp51help/index.jsp>
- WebSphere Portal V6.0
 - <http://publib.boulder.ibm.com/infocenter/wpdoc/v6r0/index.jsp>
- Workplace Services Express V2.5
 - <http://publib.boulder.ibm.com/infocenter/wseic/v2r5/index.jsp>
- Workplace Services Express V2.6
 - <http://publib.boulder.ibm.com/infocenter/wseic/v2r6/index.jsp>

Server disk space

- 470MB
- 365MB

Software product

- V5R4 System i Access for Web
- V6R1 System i Access for Web

System i Access for Web - Web Serving Environments Supported



3 Options for setting up the Access for Web environment

1. Integrated Web application server
 - Simplest to set up
 - Preconfigured HTTP web server
 - User created instances

2. Express Runtime Web Environments
 - All components provided in a single package
 - Greatly simplifies the complexity of the environment
 - Most automated
 - Running web environment when installation completes
 - Desktop icon linking to the deployed web environment

3. Step by Step
 - Greatest flexibility
 - Choice of **WebSphere Application Server** version
 - May already have components on your system



1. Integrated Web Application Server

- Simplest to set up
- Preconfigured HTTP web server
- User created instances



What is it, does System i Access for Web support it?

- What is the i5/OS integrated Web application server?
 - A web application engine much like ASF Tomcat
 - Uses minimal system resources, similar to ASF Tomcat
 - Minimal effort by an Administrator to maintain
 - Administrative instance with preconfigured HTTP web server
 - User created instances
 - V5R4 is the last release i5/OS will contain ASF Tomcat
- How is it packaged?
 - With i5/OS
 - 57xx-DG1 IBM HTTP Server for i5/OS
 - Available in PTF package/group
 - V6R1 GA Cumulative PTF package
 - V5R4 SF99114 latest available level
 - V5R3 SF99099 latest available level
- System i Access for Web support
 - V5R4 System i Access for Web supports only the Administrative instance
 - V6R1 System i Access for Web supports
 - Administrative instance
 - User created instances

To use System i Access for Web in this environment

Administrative instance and preconfigured HTTP web server

1. Stop the Web Administration for i5/OS
 - ENDTCPSPVR SERVER(*HTTP) HTTPSPVR(ADMIN)
2. Load/apply latest PTFs (review cover letters for any additional information)
 - V6R1 GA cumulative PTF package
 - V5R4 SF99114 group for product 5722-DG1
 - V5R3 SF99099 group for product 5722-DG1
3. Load/apply latest System i Access for Web PTF
 - V6R1 SI29664 or later
 - V5R4 SI29607 or later
4. Configure System i 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 System i Access for Web using preconfigured HTTP port
 - `http://>system_name>:2020/webaccess/iWAMain`
8. Done!

To use System i Access for Web in this environment

User-created instance and HTTP web server (requires use of V6R1 System i Access for Web on V5R4 or V6R1 i5/OS)

1. Load/apply latest PTFs (review cover letters for any additional information)
 - V6R1 GA cumulative PTF package
 - V5R4 SF99114 group for product 5722-DG1
2. Load/apply latest **V6R1** System i Access for Web PTF
 - V6R1 SI29664 or later
3. Start the Web Administration for i5/OS
 - STRTCPSVR SERVER(*HTTP) HTTPSVR(*ADMIN)
4. Use the Web Administration for i5/OS wizard to create an instance of the integrated Web application server and an HTTP web server.
 - `http://<system_name>:2001/HTTPAdmin`
5. Configure System i Access for Web
 - QSH
 - `cd /QIBM/ProdData/Access/Web2/install`
 - `cfgaccweb2 -appsvrtype *INTAPPSVR -instance <instance_name>`
6. Start integrated Web application server and HTTP web server using the Web Administration for i5/OS interface.
 - `http://<system_name>:2001/HTTPAdmin`
7. Open a browser to System i Access for Web using HTTP port you specified
 - `http://>system_name>:<port>/webaccess/iWAMain`

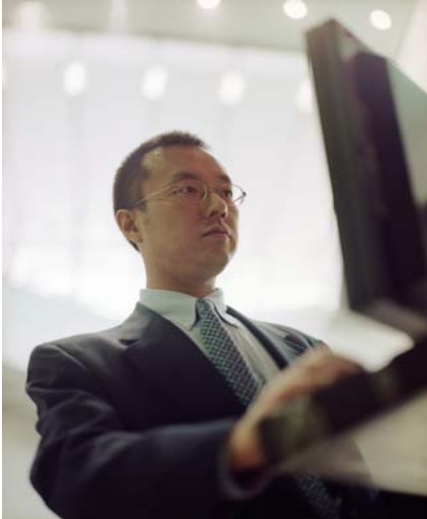
8. Done!

Integrated Web application server

Questions regarding the integrated
Web application server option?



2. Web Enable Feature – Express Runtime Environment

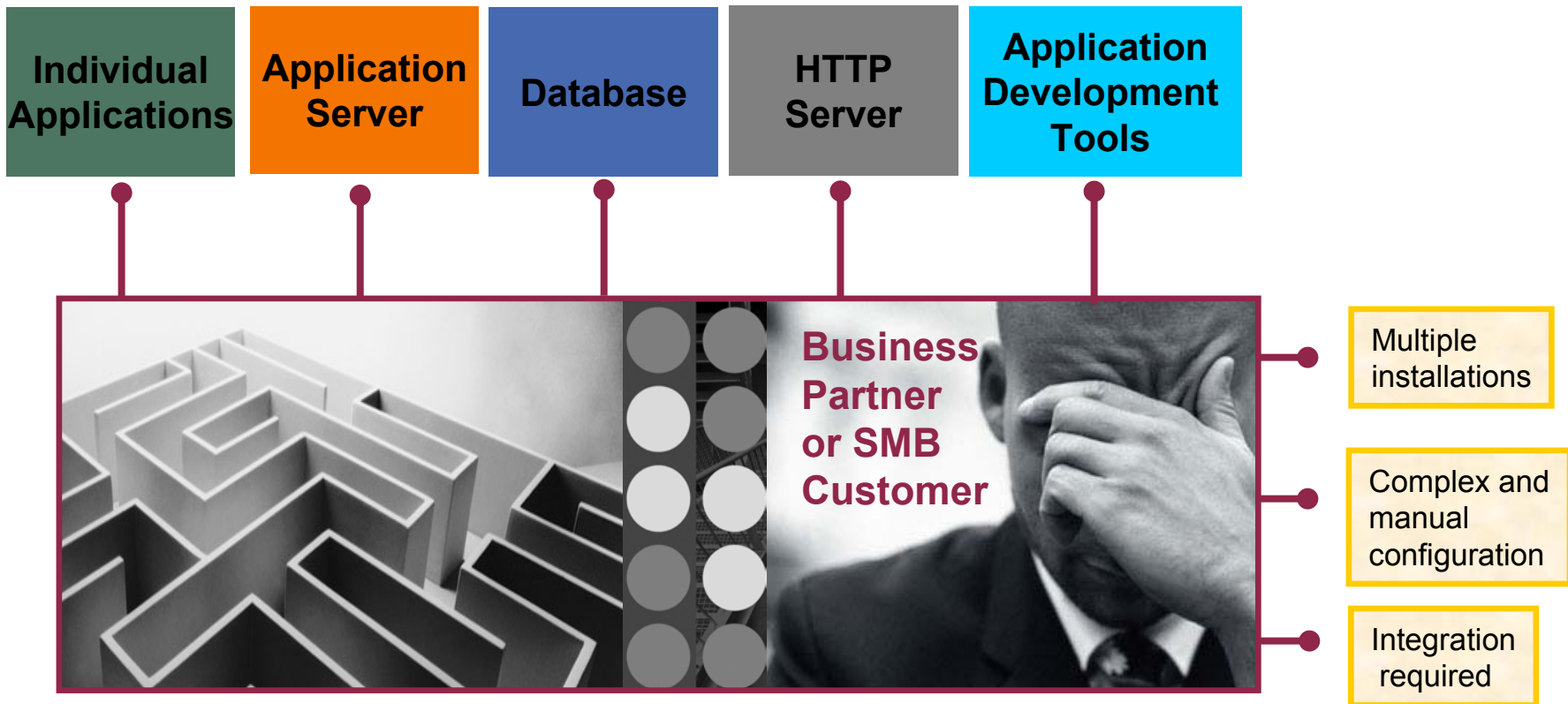


- All components provided in a single package
- Greatly simplifies the complexity of the environment
- Most automated
- Running web environment when installation completes
- Desktop icon linking to the deployed web environment

What is the problem?

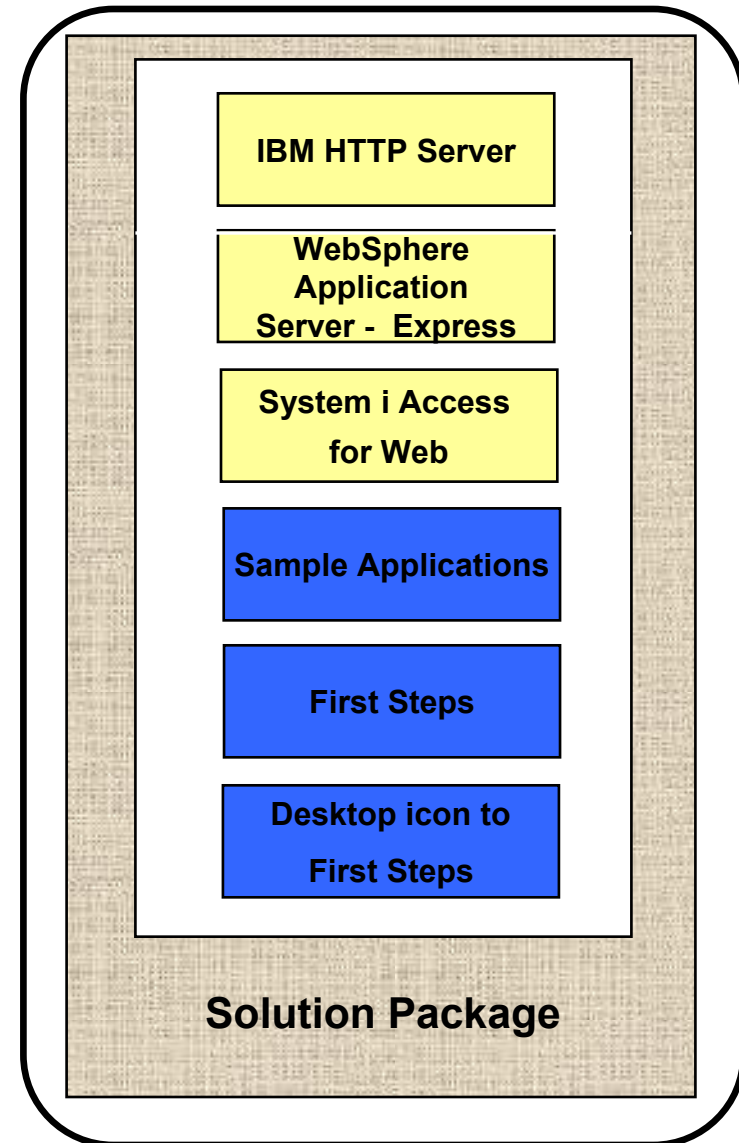
The complexity of the web-serving environment

- Several parts/pieces to install
- Can be challenging to configure all the parts/pieces



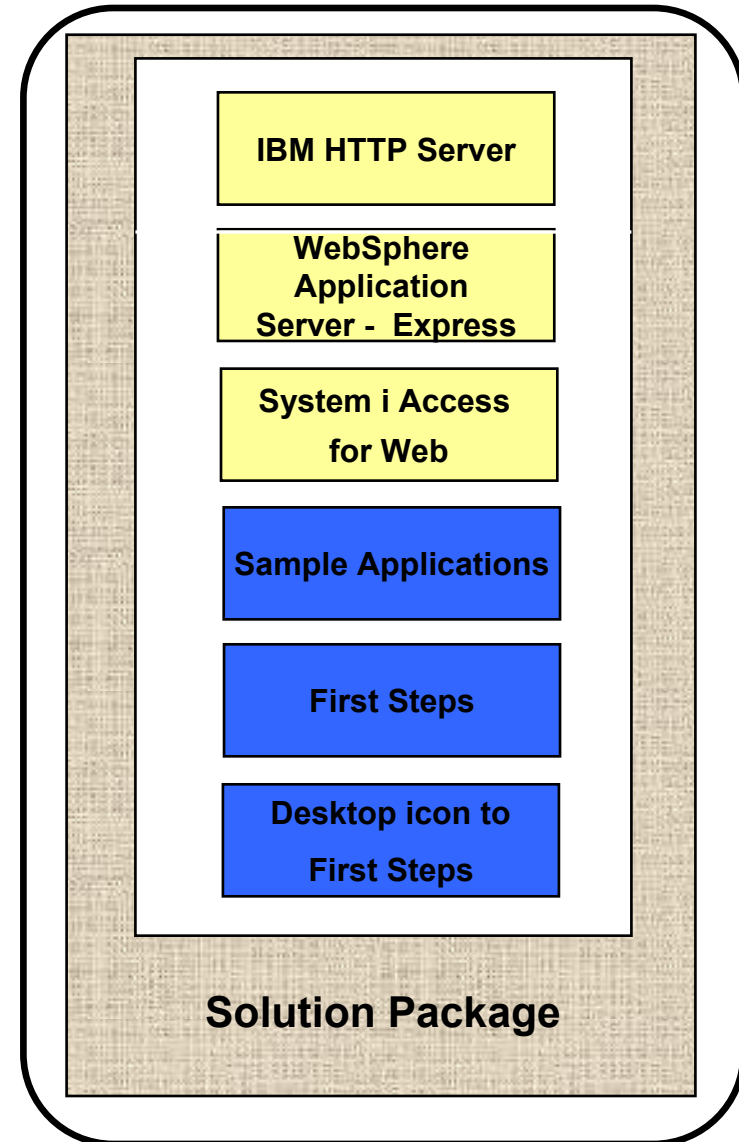
What is the solution?

- Put all the parts/pieces into a single package
 - Middleware components
 - HTTP web server
 - WAS Express 6.x
 - System i Access for Web
 - PTFs are included
 - Sample applications – modernizing an RPG application (flight400) using the following technologies:
 - HATS, WebFacing, Web Services
 - First Steps
 - Web page with links to System i Access for Web, Samples, web administration, Information
 - Getting Started Document
 - Deployment help text
 - Product licenses



What is the solution? (continued)

- Make the package easily deployable
 - Easy to use wizard run from Windows workstation
 - Middleware is uploaded, installed/configured
 - System i Access for Web is set up
 - Sample applications are set up
 - FirstSteps webpage is deployed
 - Web-serving environment is ready for immediate use
 - Desktop icon to FirstSteps web page



Target Audience

- i5/OS customers and partners
 - Anyone wanting/needing a simple way to setup web-serving on their i5/OS
- Users of the following:
 - System i Access for Web – end user web browser access to i5/OS resources
 - WDHT / HATS / WebFacing applications
 - J2EE web applications (JSF, JSP, servlets, EJBs, etc)
 - SOA applications (web services, including RPG/COBOL integration)
 - Demo of an application modernized using SOA, HATs and WebFacing
- Partners
 - Modify a similar solution to include their applications
 - Obtain SAT and source from PartnerWorld
 - Rebuild solution to include their application

Packaging/Ordering

Express Runtime Web Environments

5722-WE2

5761-WE2

- V5R4 i5/OS
 - 5722-WE2 V1R1M0 = WAS 6.0.2.9 & V5R4 System i Access for Web
 - 5722-WE2 V1R2M0 = WAS 6.1.0.11 & V5R4 System i Access for Web

- V6R1 i5/OS
 - 5761-WE2 V1R1M0 = WAS 6.1.0.11 & V6R1 System i Access for Web

- Ships with all i5/OS orders
 - V5R4 – ships CDs, DVD is orderable
 - V6R1 – ships DVDs
 - All media contained in a single shrink wrapped package

- Packaged along with WebSphere Application Server - Express product CDs
 - Label on package identifies the two products and their purposes
 - Products identified on media labels
 - Look for DVD labeled: Express Runtime Web Environments V1R1, contains everything you need

Can also be ordered separately

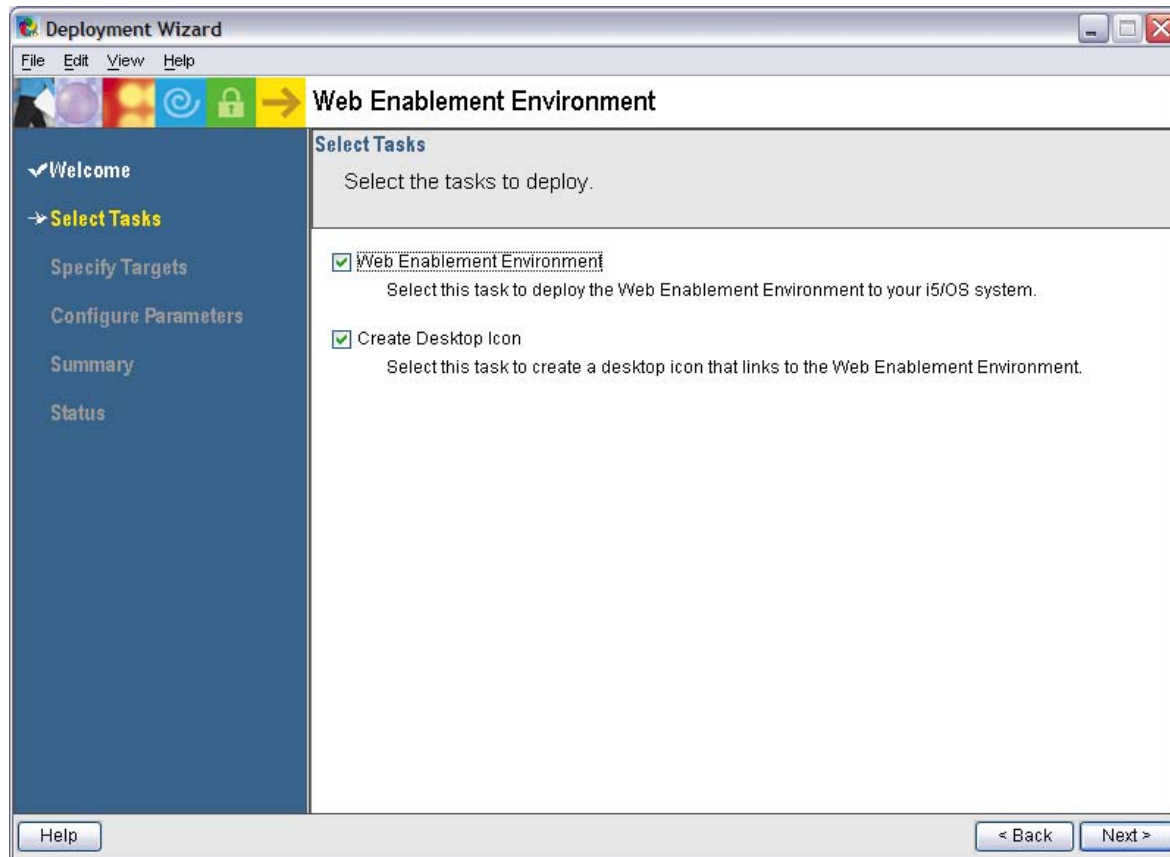
- No-charge feature of 5722-WE2 Web Enablement for i5/OS
 - Order feature 5905 for CDs
 - Order feature 5906 for a DVD

Installation/Setup Process

- Read the ReadMe packaged with the product
 - Verify requirements for Windows workstation and i5/OS system
- From a Windows workstation, launch the deployment wizard
 - Provide credentials
 - Specify i5/OS system to deploy
 - Name the HTTP web server, WebSphere profile/application server, ports
 - Optionally a backend i5/OS for System i Access for Web to connect
- Deployment wizard runs
 - Pushing middleware from workstation/media to the i5/OS system
 - Installs/configures middleware
 - Install/configures System i Access for Web, sample applications, FirstSteps web page
 - Creates desktop icon on Windows workstation
- Deployment wizard complete
 - Click desktop icon named Web_Enablement_Environment_V5R4M0 or Web_Enablement_Environment_V6R1M0
 - FirstSteps webpage provides links to web environment, System i Access for Web, sample applications
 - Administrator can then distribute web browser URL to users
 - GO LICPGM will list
 - 5733-SO1 Base Express Runtime Web Environments
 - 5733-SO1 1 Web Enablement Environment

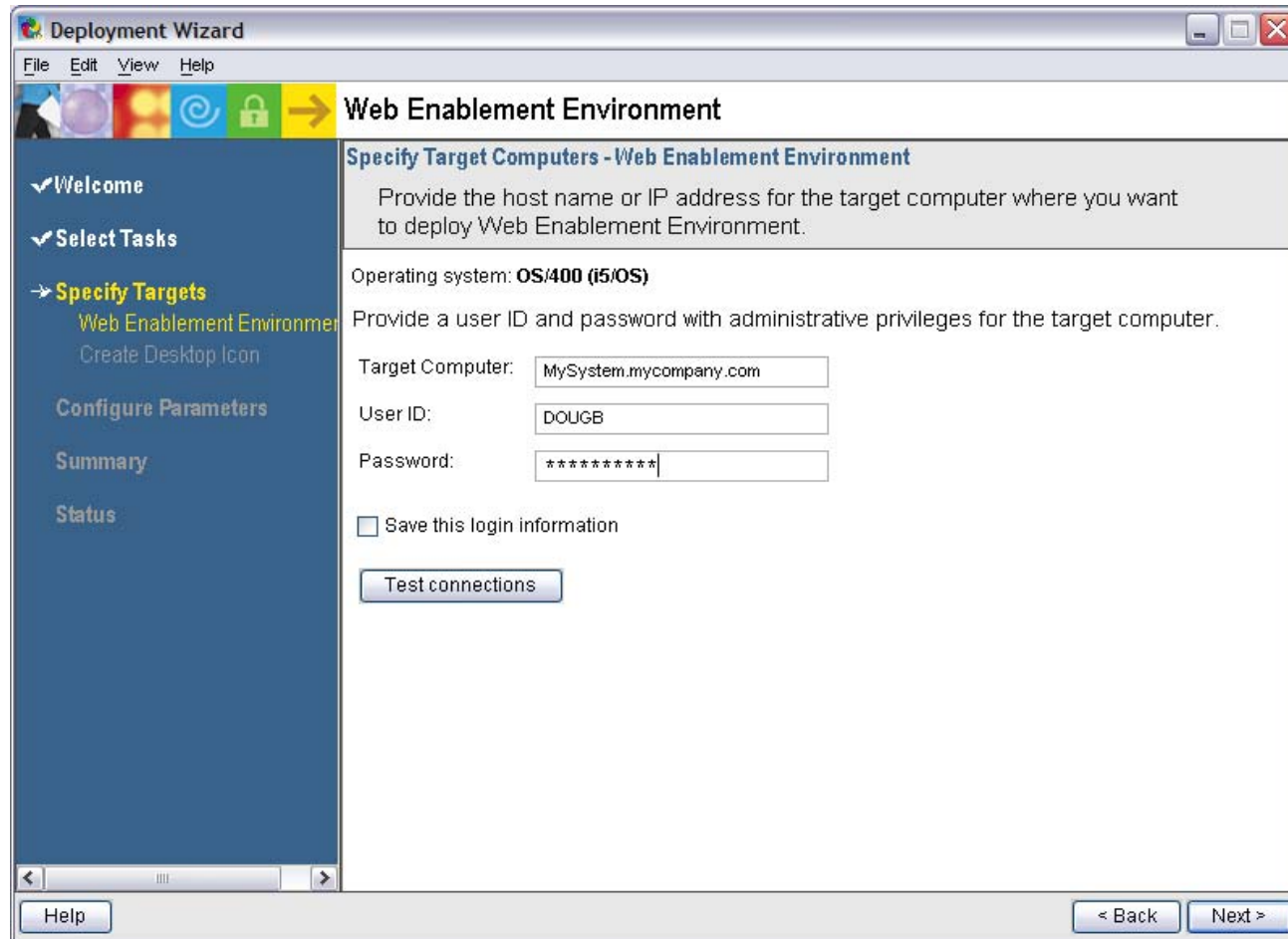
Demonstration

Launch the wizard. Deploy the web environment and create the desktop icon to the FirstSteps webpage



Demonstration (continued)

Name of **i5/OS system** to deploy the environment to



Demonstration (continued)

Name the **HTTP** web server and its port

Name the **WebSphere** profile/app server and its port range

The screenshot shows the 'Deployment Wizard' window for the 'Web Enablement Environment'. The left sidebar shows the navigation tree with 'Configure Parameters' selected. The main area is titled 'Configure Parameters - HTTP and application server names and ports'. It contains a 'Typical' tab and an 'Advanced' tab. Below the tabs are four input fields for configuration parameters:

Parameter	Value
* HTTP server name	MYHTTPSVR
* HTTP server port	10000
* Application server name	MYAPPSVR
* Application server starting port	10001

At the bottom of the window, there are 'Help', '< Back', and 'Next >' buttons.

Questions regarding the
Express Runtime Web Environments
option?



3. Step by Step



- **Greatest flexibility**
- **Choice of WebSphere Application Server version**
- **May already have components on your system**

Formula for successful setup and configuration

You need to do the following in this order:

- 1. Decide what web application server environment to run**
- 2. Install System i 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, integrated Web application server
 - System i Access for Web
- 4. Setup web-serving environment**
- 5. Configure System i Access for Web**
- 6. Verify the installation and configuration**

Information resources:

- These steps are detailed in System i Access for Web InfoCenter information
- Examples at <http://www.ibm.com/systems/i/software/access/web/doc.html>

Decide what web application server environment to run



Which web application server environment?

System i Access for Web can be deployed to a variety of web serving environments.

– Servlets

- Integrated Web application server
- 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
 - ASF Tomcat is delivered within the IBM HTTP Server for i5/OS product (5722-DG1)
 - V5R4 i5/OS is last release for ASF Tomcat on i5/OS

– 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 System i Access for Web on your i5/OS system



Install System i Access for Web on your i5/OS system



Installing System i Access for Web

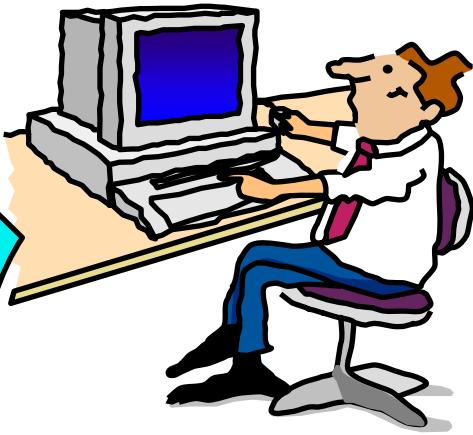
- Use the RSTLICPGM command to restore (install) the licensed program
- RSTLICPGM LICPGM(5722XH2) DEV(OPT01) OPTION(*BASE) - V5R4 version
- RSTLICPGM LICPGM(5761XH2) DEV(OPT01) OPTION(*BASE) - V6R1 version

The restore will...

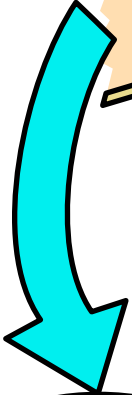
- Create library QIWA2 and objects in QIWA2
- Create file system directories
 - /QIBM/ProdData/Access/Web2/...
 - /QIBM/UserData/Access/Web2/...
- Set basic ownership/authorities for library and file system objects

The restore will not...

- Make any changes to HTTP web server configurations
- Make any changes to web application server configurations
- Enable use of System i Access for Web

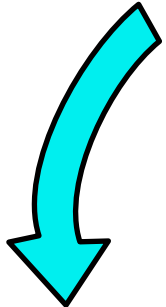
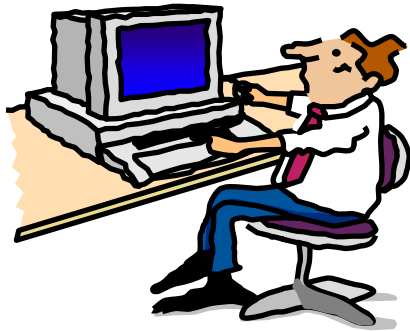


Verify, load, apply any additional PTFs




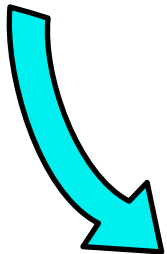
Verify, load, apply any additional PTFs

- Each component of the web application serving environment has PTFs
 1. WebSphere Application Server
 - <http://www.ibm.com/systems/i/software/websphere/index.html>
 2. Integrated Web application server
 - <http://www.ibm.com/systems/i/software/http/index.html>
 3. i5/OS Cumulative PTF package
 4. HTTP web server
 - <http://www.ibm.com/systems/i/software/http/index.html>
 5. WebSphere Portal/Workplace Services Express
 - Refer to the Portal and Workplace Information Center documentation
 6. System i Access for Web
 - <http://www.ibm.com/systems/i/software/access/web/servicepacks.html>
- PTFs for the above components should be verified and updated as needed

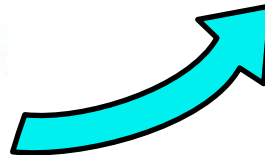
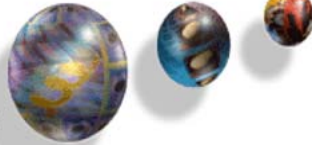


Setup up web-serving environment

 HTTP Server for iSeries



IBM
WebSphere



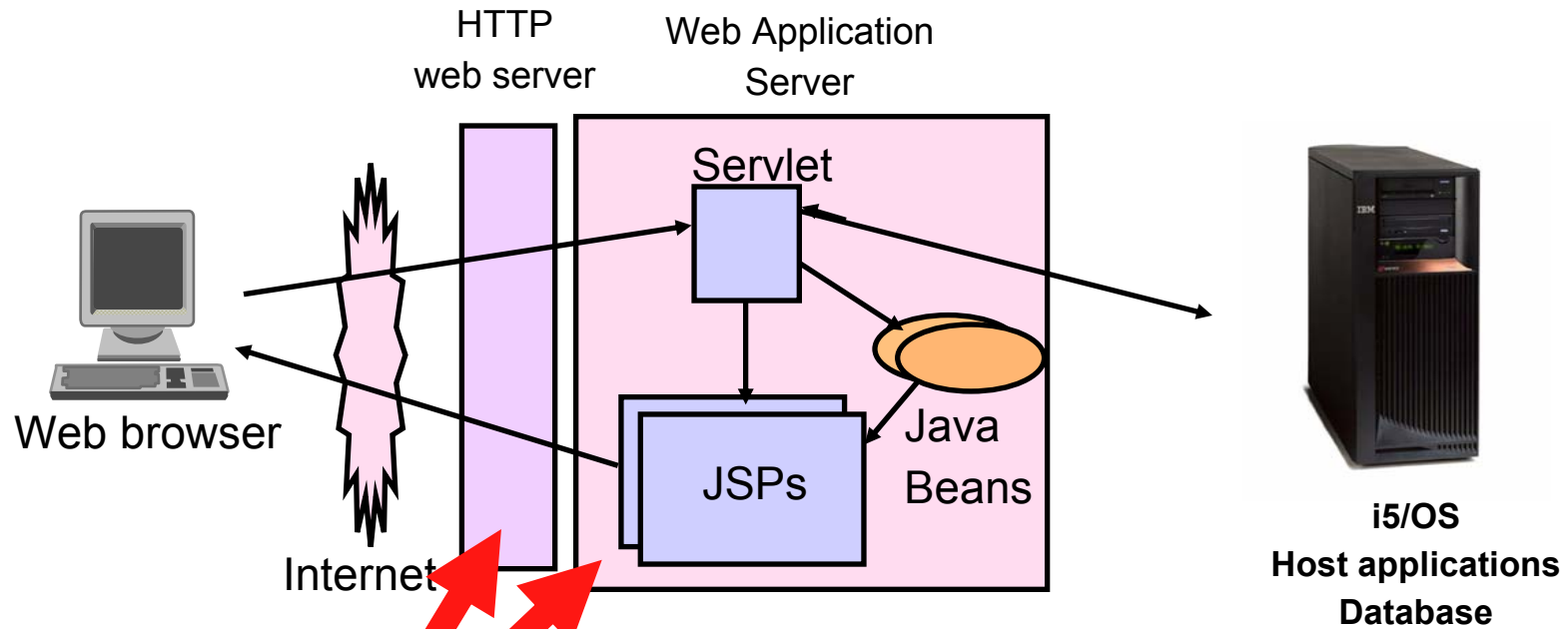
Step by Step

Setup web-serving environment

Tier 1

Tier 2

Tier 3



Need to create...

Notes: Set up web-serving environment

- 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

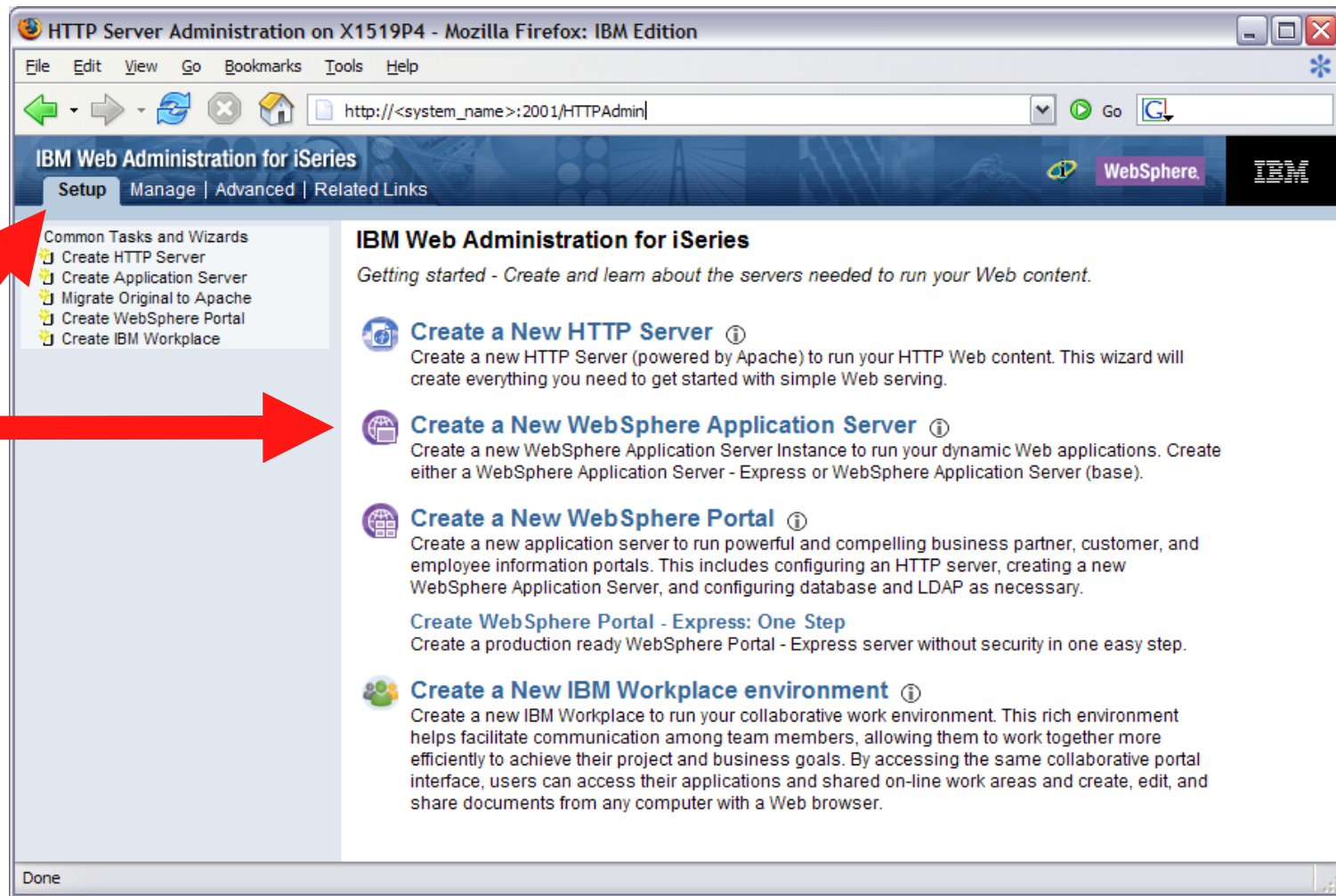
Setup web-serving environment

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`

Setup web-serving environment (continued)

Setup → Create Application Server



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

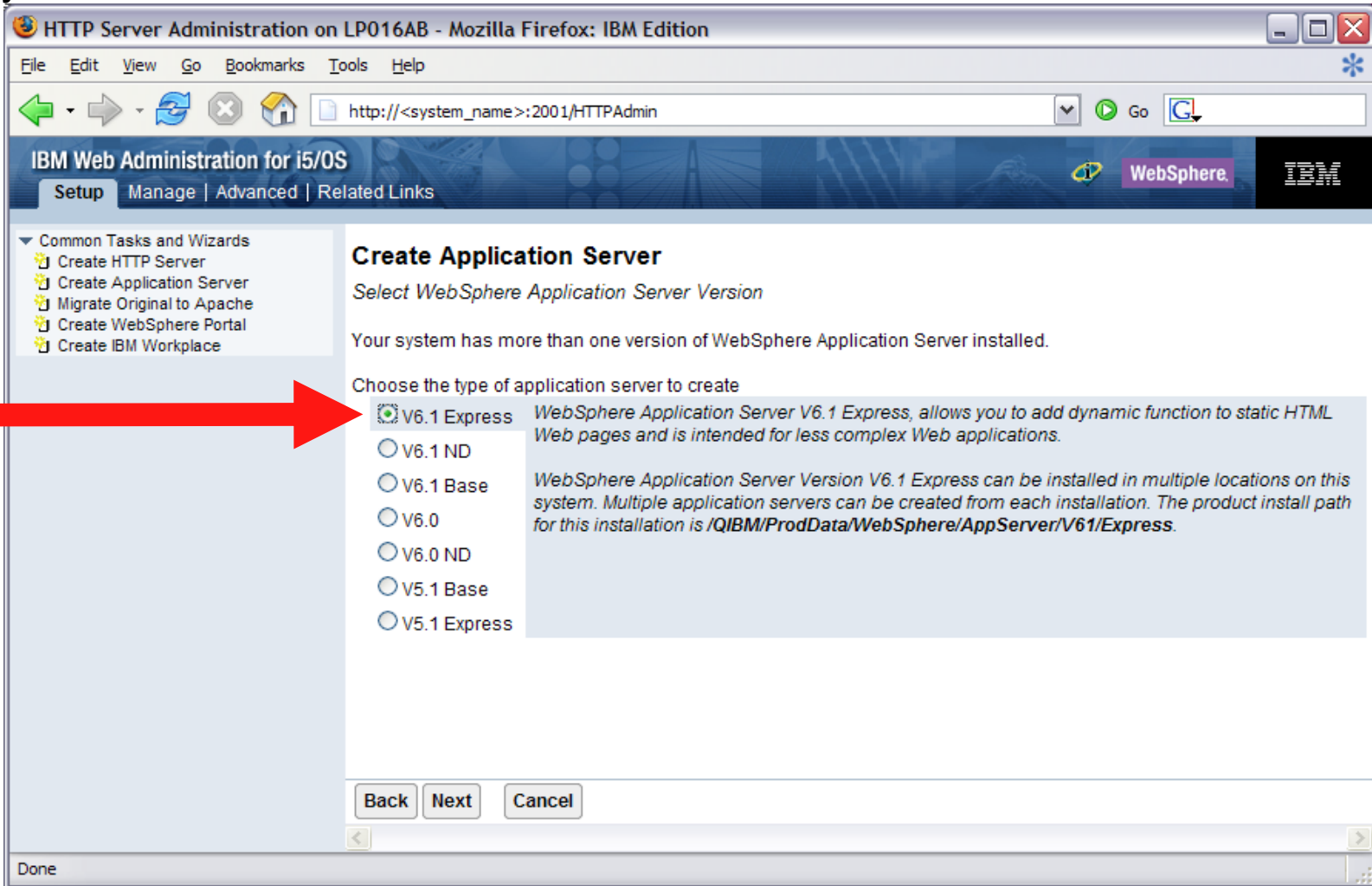
Getting started - Create and learn about the servers needed to run your Web content.

- 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

Setup web-serving environment (continued)

Select version of WebSphere Application Server of those installed on your system



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

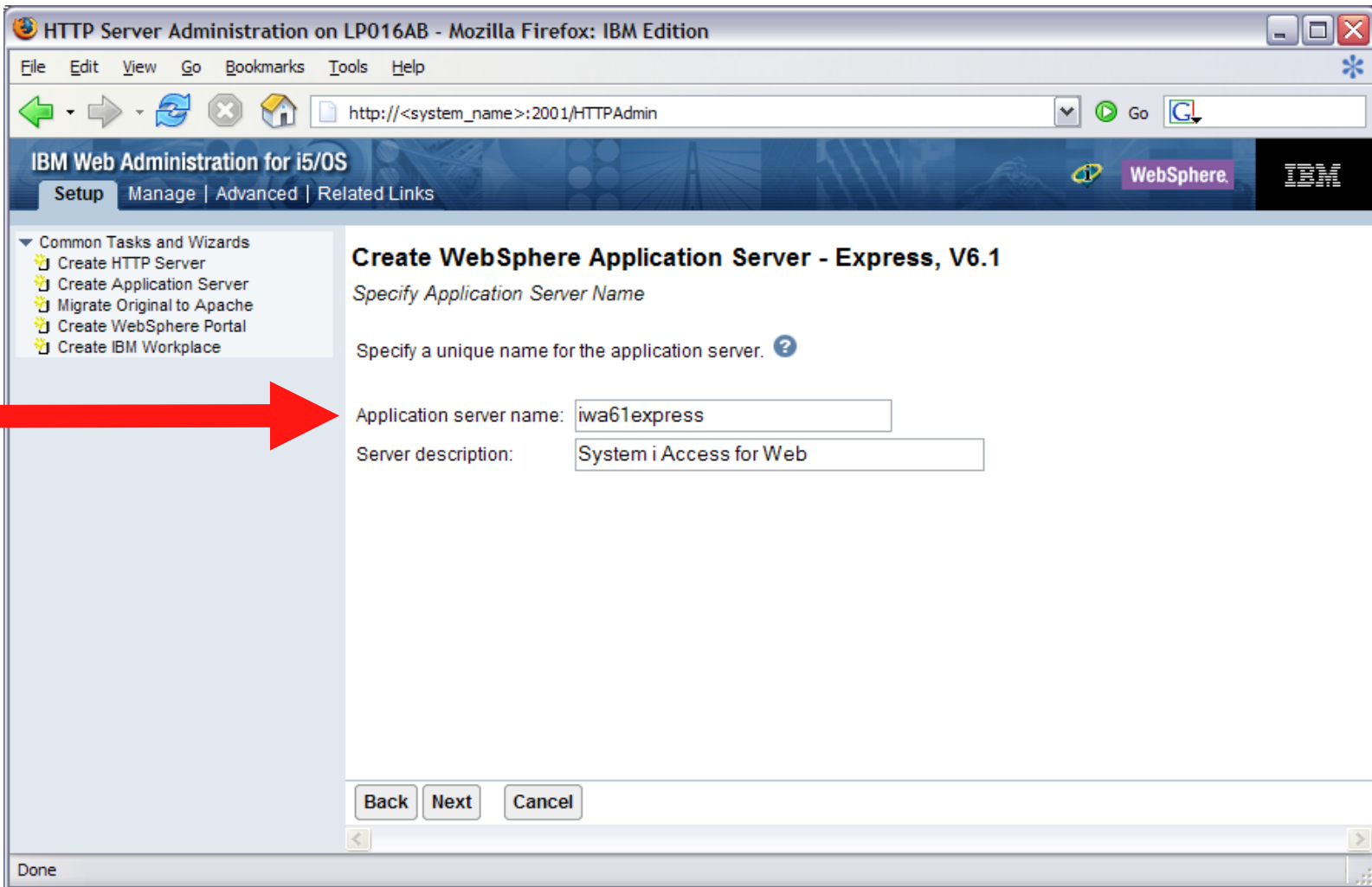
- V6.1 Express *WebSphere Application Server V6.1 Express, allows you to add dynamic function to static HTML Web pages and is intended for less complex Web applications.*
- V6.1 ND
- V6.1 Base *WebSphere Application Server Version V6.1 Express can be installed in multiple locations on this system. Multiple 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

Setup web-serving environment (continued)

Enter a name for the web application server, optionally a description



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

WebSphere IBM

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

Specify Application Server Name

Specify a unique name for the application server. ?

Application server name:

Server description:

Back Next Cancel

Done

Setup web-serving environment (continued)

Enter name for HTTP server, optional description, port on which this HTTP server will listen

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

WebSphere IBM

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:

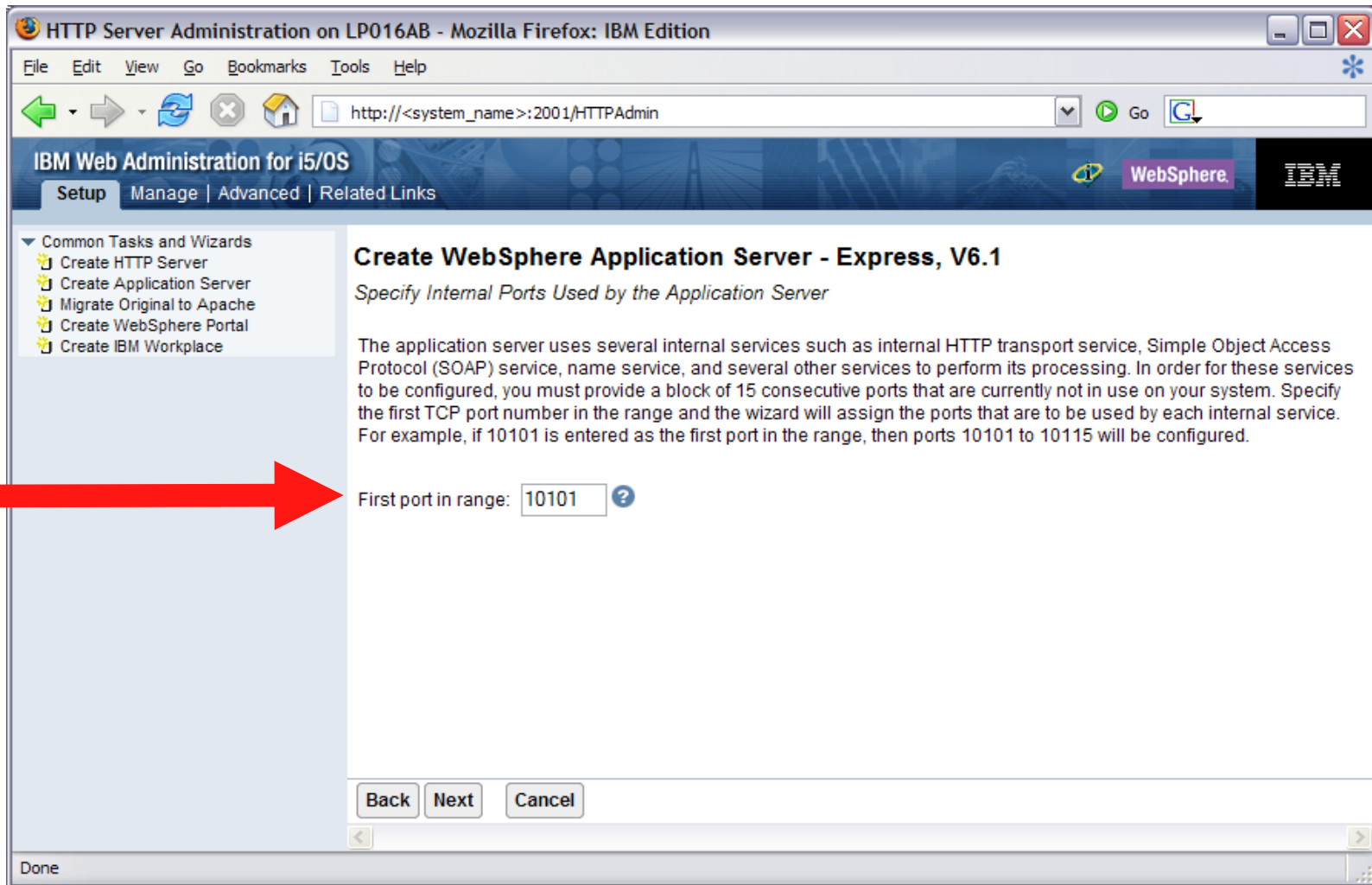
Note: Most browsers make requests to port 80 by default.

Back Next Cancel

Done

Setup web-serving environment (continued)

Enter first port in a range of available ports – the communication ports between the HTTP server and WAS



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 content is titled "Create WebSphere Application Server - Express, V6.1" and includes the instruction: "Specify Internal Ports Used by the Application Server". The text explains that the application server uses several internal services and requires a block of 15 consecutive ports. A red arrow points to the "First port in range" input field, which contains the value "10101". Below the input field are "Back", "Next", and "Cancel" buttons.

Setup web-serving environment (continued)

A few other steps in the wizard, then 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 'Finish' button is highlighted with a red arrow.

Summary

When you click **Finish** this WebSphere application server will be created.

Application Server | **HTTP Server**

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:

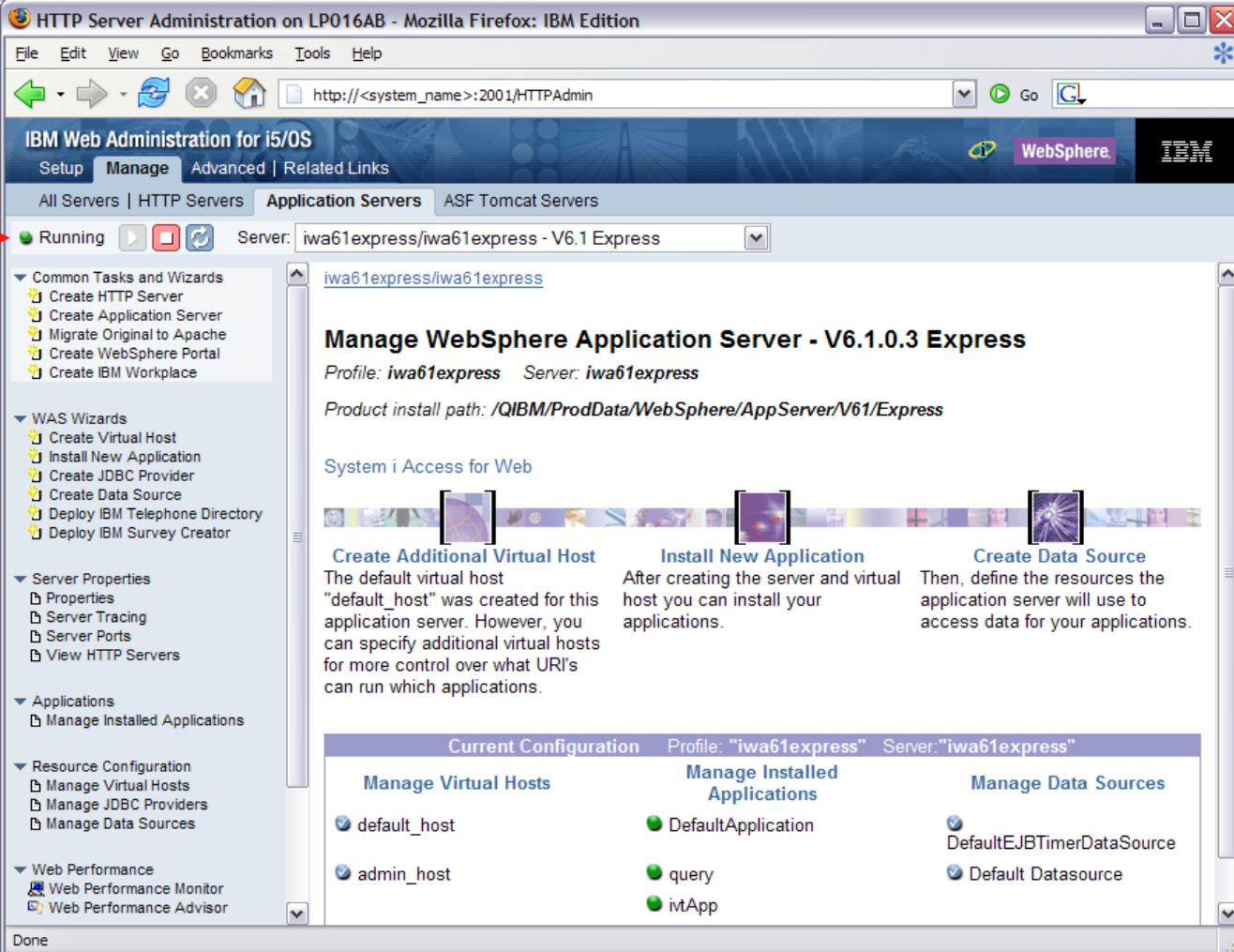
Application name	URL to access application
query	Used by EJB client applications
Default Applications	http://LP016AB:10100/snoop
	http://LP016AB:10100/hitcount
	http://LP016AB:10100/hello

Note: To access the application(s) you have chosen, start both the application server and HTTP server, then enter a URL from the table above.

Finish **Cancel** **Printable Summary**

Setup web-serving environment (continued)

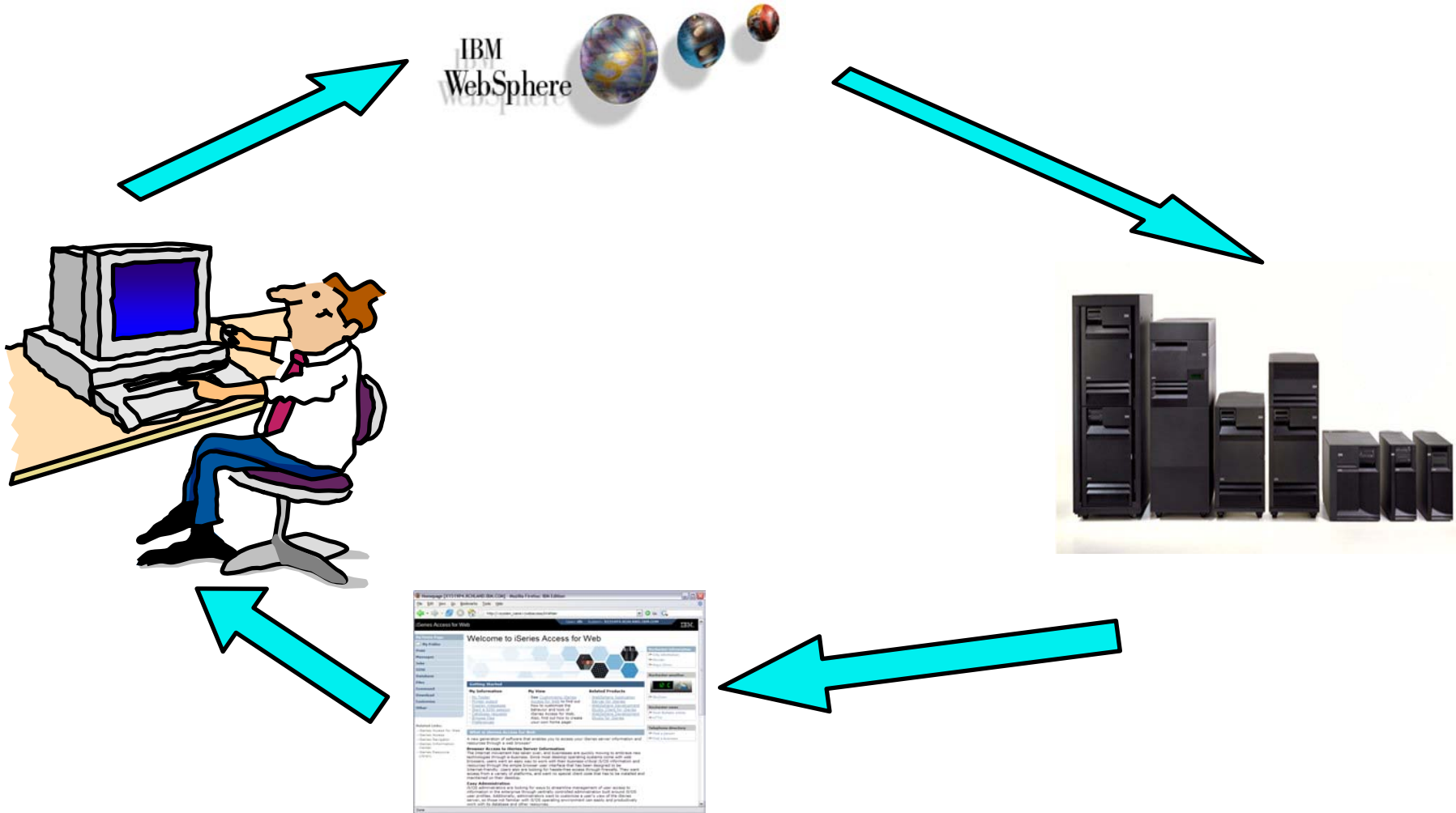
Environment is ready for configuratoin when status reaches Running



The screenshot displays the IBM Web Administration for i5/OS interface in Mozilla Firefox. 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 main navigation tabs are "Setup", "Manage", "Advanced", and "Related Links". The "Manage" tab is active, showing "All Servers | HTTP Servers | Application Servers | ASF Tomcat Servers". A red arrow points to the "Running" status indicator for the selected server, "iwa61express/iwa61express - V6.1 Express". The left sidebar contains a tree view with categories: "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" for profile "iwa61express" on server "iwa61express". It includes a "System i Access for Web" section with three steps: "Create Additional Virtual Host", "Install New Application", and "Create Data Source". Below this, a table shows the current configuration for the selected server.

Current Configuration	Profile: "iwa61express"	Server: "iwa61express"
Manage Virtual Hosts	Manage Installed Applications	Manage Data Sources
<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	

Configure System i Access for Web



Configure System i Access for Web

System i Access for Web must be deployed (configured) to a running web application server

System i Access for Web provides CL and QShell commands

- CL commands – QIWA2 library
 - CFGACCWEB2 Configure System i Access for Web
 - STRACCWEB2 Start System i Access for Web
 - ENDACCWEB2 End System i Access for Web
 - RMVACCWEB2 Remove System i Access for Web

- QShell - /QIBM/ProdData/Access/Web2/install
 - cfgaccweb2 Configure System i Access for Web
 - straccweb2 Start System i Access for Web
 - endaccweb2 End System i Access for Web
 - rmvaccweb2 Remove System i 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

- /QIBM/UserData/Access/Web2/... structure

- Allows for PTFs that make use of the normal i5/OS PTF tools

Configure System i Access for Web (continued)

Use available documentation →

- System i Access for Web – Information Center
 - Place to start to get System i Access for Web installed and running

When the commands are run →

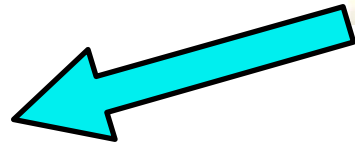
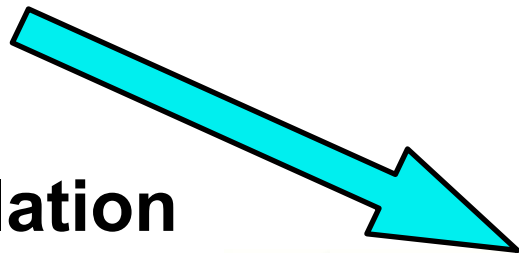
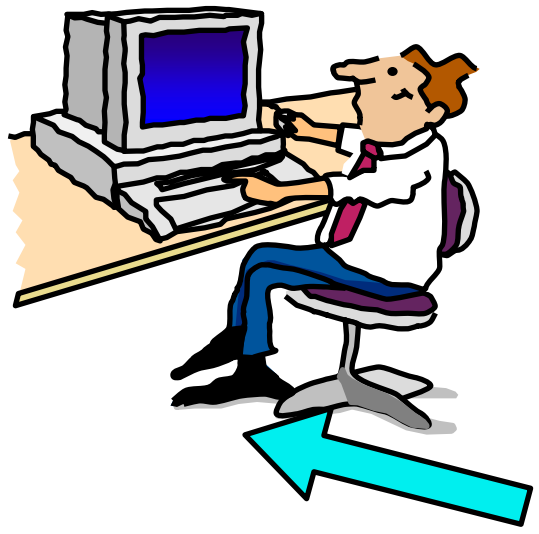
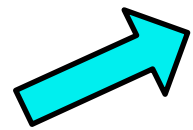
- The WebSphere web application server must be running before running the CFGACCWEB2 or RMVACCWEB2 commands
- The WebSphere web application server will need to be restarted after the CFGACCWEB2 or RMVACCWEB2 commands
 - No updates are made to the HTTP web server configuration.

Notes

- **Do not use the web administration interface or WebSphere Admin console to configure (deploy) or remove System i Access for Web**
- **Do not attempt to migrate a WebSphere environment to another WebSphere environment when System i Access for Web is configured**

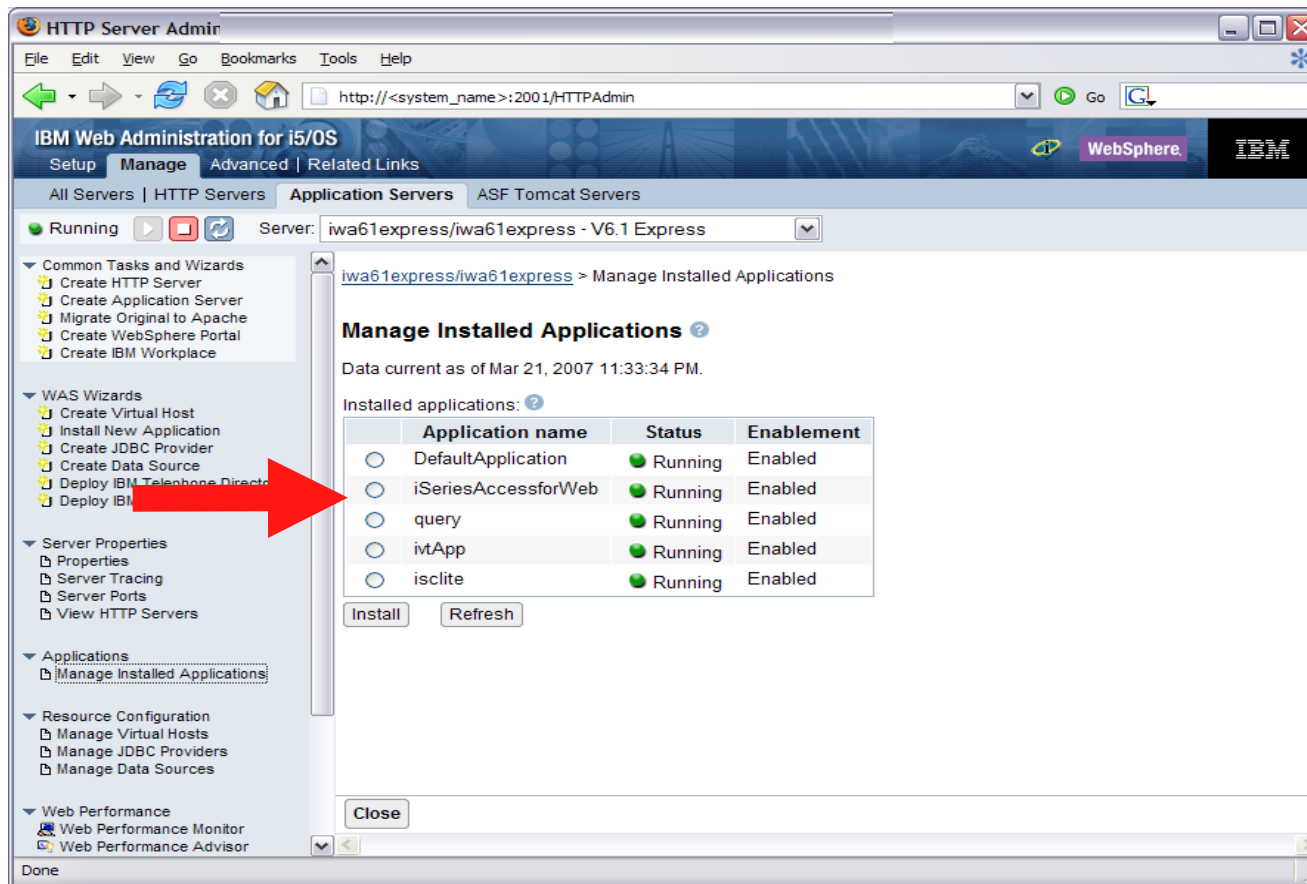


**Verify the installation
and configuration**



Verify the installation and configuration

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



The screenshot displays the IBM HTTP Server Administration interface. The main content area shows the 'Manage Installed Applications' page for the server 'iwa61express/iwa61express - V6.1 Express'. The page includes a table of installed applications with columns for Application name, Status, and Enablement. A red arrow points to the 'Manage Installed Applications' link in the left-hand navigation pane.

Application name	Status	Enablement
DefaultApplication	Running	Enabled
iSeriesAccessforWeb	Running	Enabled
query	Running	Enabled
ivtApp	Running	Enabled
isclite	Running	Enabled

When things do not work

- Verify the HTTP web server is running
- Verify the WebSphere web application server was restarted after running CFGACCWEB2
- Verify the WebSphere web application server is running
- Verify you have the latest group PTFs for the HTTP web server and WebSphere Application Server.
- Verify that System i Access for Web is listed as an installed application in the WebSphere application server (via the IBM Web Administration for i5/OS interface)
- Look at System i Access for Web logs

High level translated log	/QIBM/UserData/Access/Web2/logs/cmds.log
Low level untranslated log	/QIBM/UserData/Access/Web2/logs/cmdstrace.log
Logs for specific WAS servers. Note: some logs may be EBCDIC requiring use of WRKLNK i5/OS command to view them	/QIBM/UserData/Access/Web2/logs/<appsvrtype>/<wasprf>/<appsvr>/logs/*

- Next, if needed, the doc will lead you to the WebSphere Application Server or Portal logs

Part 2: Runtime Considerations

Controlling Access

3 methods to control access using System i Access for Web

- **Administration Policies**

- Administrators can use the Customize function to set policies for users and groups of users.

- **User Preferences**

- Users can set their own Preferences for things like
 - What tabs are available in the navigation bar
 - How to view output (default rows/columns per page)
 - How to filter output

- **Customize the Home page and template files**

- Administrators can use the Customize function to replace the default System i Access for Web home page with their own home page.
- Administrators can use the Customize function to replace the default template that defines the layout, look, and feel of System i Access for Web pages
- Style sheets - The look of the System i Access for Web page content is now controlled by external style sheets.

Controlling access

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

The screenshot displays a web browser window titled "Homepage" with the address bar showing "http://myIseries.myCompany.com/webaccess/iWAHome". The user is logged in as "dlb". The main content area features a "Welcome to iSeries Access for Web" message with a decorative hexagonal graphic. Below this, there are several sections: "Getting Started" with links for "My Information", "My View", and "Related Products"; "What is iSeries Access for Web" which describes the software's purpose; "Browser Access to iSeries Server Information" discussing e-business trends; "Easy Administration" for enterprise users; and "Key Capabilities" listing features like browser access to 5250 applications. Sidebars on the right provide local information for Rochester, including city details, weather (21:22), news, and a telephone directory.

Controlling access

Main Page = <http://<myiseries>:<port>/webaccess/iWAMain>

The screenshot shows a web browser window titled "iSeries Access for Web". The address bar contains the URL "http://myiSeries.myCompany.com/webaccess/iWAMain". The page content is as follows:

iSeries Access for Web

Welcome to iSeries Access for Web, the lightweight, browser-based access to your iSeries server.

Pure Java servlet based access

iSeries Access for Web is a set of servlets that run on iSeries servers as extensions to the HTTP server. The servlets provide access to databases, files, print queues, printer output, and messages contained on the iSeries server.

Industry standard protocol

iSeries Access for Web uses the industry standard HTTP and HTTPS protocols instead of proprietary TCP/IP ports and protocols. Firewall issues are much more manageable as a result.

Lightweight access

iSeries Access for Web provides lightweight, and convenient access to iSeries servers from any web browser. Most of the iSeries Access for Web functions have minimal browser requirements and work with almost any browser on any platform.

Server based

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

Object level security

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

Fully customizable

Access to iSeries Access for Web functionality can be restricted for users and groups of users. iSeries Access for Web is fully customizable so a user will only see and access what the administrator has configured for them to use and see.

Web components

iSeries Access for Web is also a set of web components for web applications. Web applications can link to the iSeries Access for Web servlet URLs and take advantage of the functions that iSeries Access for Web provides.

Controlling access

Product functionality



iSeries Access for Web Database

File Edit View Go Bookmarks Tools Help

http://myiSeries.myCompany.com/webaccess/iWAMain?tab=database

User: dlb

Database

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

My Home Page

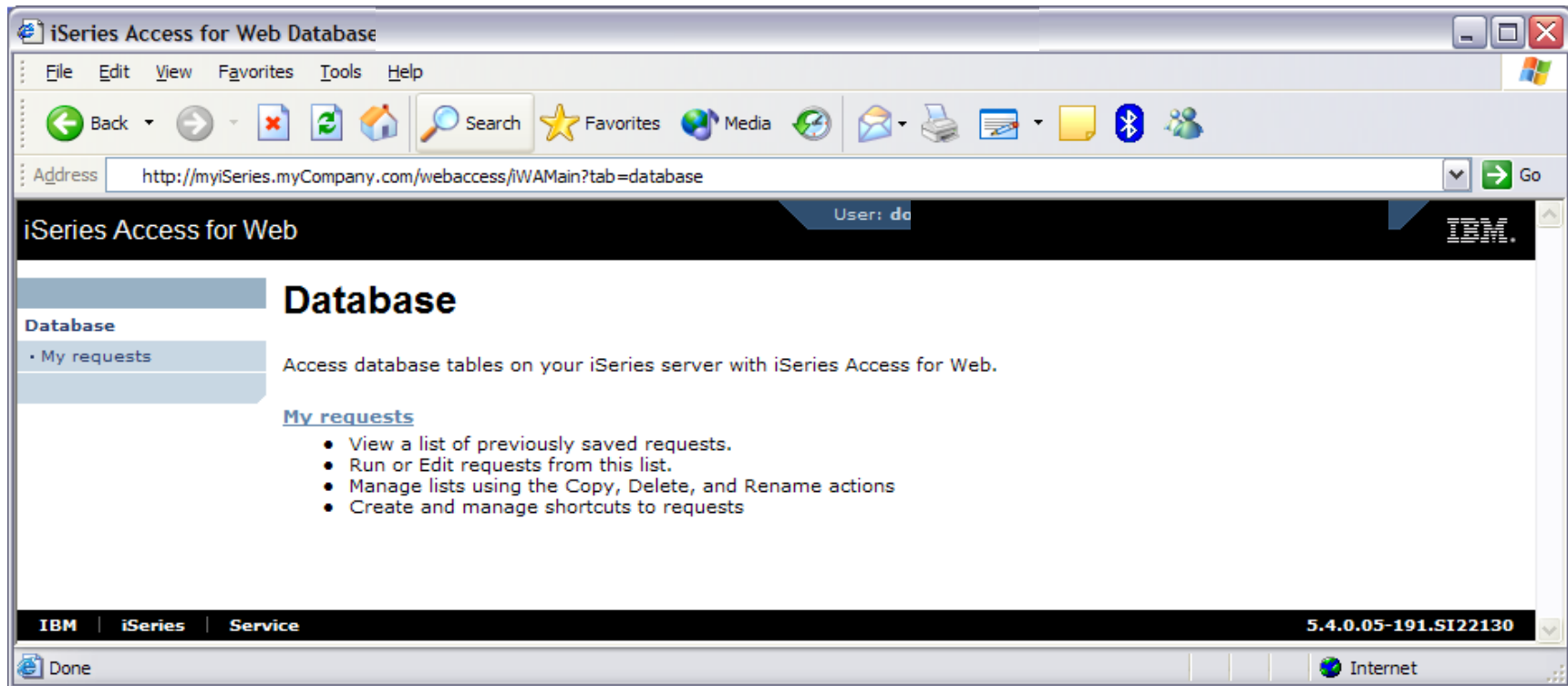
- My Folder
- Print
- Messages
- Jobs
- 5250
- Database**
 - Tables
 - My requests
 - Run SQL
 - Copy data to table
 - Import request
 - Import query
 - Extract server data
- Files
- Command
- Download
- Customize
- Other

Related Links:

- iSeries Access for Web
- iSeries Access
- iSeries Navigator
- iSeries Information Center
- iSeries Resource Library

Controlling access

Sample for a user that only performs preset database queries



The screenshot shows a web browser window titled "iSeries Access for Web Database". The address bar contains the URL "http://myiSeries.myCompany.com/webaccess/iWAMain?tab=database". The page content includes a header "iSeries Access for Web" with a user name "User: do" and the IBM logo. The main content area is titled "Database" and contains a sidebar with "Database" and "My requests". The main text area says "Access database tables on your iSeries server with iSeries Access for Web." and lists "My requests" with a bulleted list of actions: "View a list of previously saved requests.", "Run or Edit requests from this list.", "Manage lists using the Copy, Delete, and Rename actions", and "Create and manage shortcuts to requests". The footer shows "IBM | iSeries | Service" and the version "5.4.0.05-191.SI22130". A red arrow points to the "Database" section in the sidebar.

***Controlling Access:
Setting policies for users and groups of users***

Controlling User Access

My Home Page
 My Folder
Print
Messages
Jobs
5250
Database
Files
Command
Download
Customize
Other

- Customize policies for users and groups to
 - Allow/Deny functions users can access
 - Limit the information users can see
- Use group profiles to simplify policy management
 - Manage policies for group profiles
 - Add/remove users from groups
- When a function is restricted, access to the servlet is restricted
- You need *SECADM authority to customize profiles

Notes: Controlling Access - How & Whom?

- The Customize function allows administrators to set policies for users and groups of users.
- These policies control...
 - Functions a user can perform.
 - How certain information is presented to the user.
- When a function is restricted...
 - Its navigation bar content is removed.
 - Access to the servlet is restricted.
 - It takes effect immediately.
- Administrators with *SECADM special authority are automatically authorized to administer settings for users and groups of users to which they have authority.
- These administrators can then grant other user profiles permission to administer System i Access for Web functions.

Controlling User Access

- System i Access for Web ships with default policy settings
- Default allows most functions to be available to all users
- Use *PUBLIC to set policies for all users
- Strategy:
 - Grant an administrator profile access to all functions
 - Deny access to all functions to *PUBLIC
 - Then allow specific users/groups access to specific functions

iSeries Access for Web User: cminer System: RCHLAND.IBM.COM

Policies
Profile: *PUBLIC

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

[View all policies](#)

Controlling Access - Setting policies (continued)

Policies

Specify the profile you want to edit.

Profile: **Browse...**

Edit Policies

[User profiles](#)
Work with the user profiles you are authorized to customize.

[Group profiles](#)
Work with the group profiles you are authorized to customize.

[Import policies](#)
Import policies from a file into iSeries Access for Web.

[Export policies](#)
Export policies from iSeries Access for Web to a file.

[Policies help](#)
View help for working with policies.

Related Links:

- iSeries Access for Web
- iSeries Access
- iSeries Navigator
- iSeries Information Center
- iSeries Resource Library

IBM | iSeries | Service 5.4.0.05-191.SI22130

Controlling Access - Setting policies (continued)

Policies - User Profiles

Profile filter: [Filter List](#)

Filter by: Profile Description

[1] 2 3 4 5 6 7 8 9 10

Profile	Description	Action
ACBARRON	Alma Carolina Barron Perez - GDL T/L 877-5656	
ACN	Ali Nelson 3-6874	
ADSIERRA	Alma Delia Sierra/Mexico/Contr/IBM@IBMMX	
AGUEDA	Agueda Martinez Hernandez Magro/Mexico/IBM@IBMMX	
AHANSON	Andrew Hanson 3-5571	
AHOMIKE	Mike Aho/Rochester/IBM@IBMUS	
ALEJ	Alejandro Bascuas/Rochester/IBM@IBMUS	
ALICIAM	Alicia Martinez Cruz/Mexico/Contr/IBM@IBMMX	
ALITEST		
ANDREWS	Greg Andrews/Rochester/IBM@IBMUS	
ANTARES	Elias Ricardo Castellanos/Mexico/Contr/IBM@IBMMX	
ARABIC	Gilberto Martinez Cortes/Mexico/Contr/IBM@IBMMX	
ATCLARK	Adam Clark, 3-3941	
ATOMKO	Ana Tomko Sanchez/Mexico/Contr/IBM@IBMMX	
BAZEY	John Bazey (3-7108)	
BEACH	Mark Beach/Rochester/IBM@IBMUS	
BECKYD	Rebecca K Dimock/Boulder/IBM@IBMUS	

Actions:
 Edit policies
 View all policies
 View group membership
 View group members
 Copy policies
 Reset policies

Controlling Access - Setting policies (continued)

Browser window: Edit Policies - Database

Address bar: http://myiSeries.myCompany.com/webaccess/WACustomizeDatabase?profile=DLB

User: dlb

Edit Policies - Database

Profile: DLB

Policy	Derived From	Action	Setting
Database access	Shipped default	Use current setting	Allow
Database tab	Shipped default	Use current setting	Show
Tables	Shipped default	Use current setting	Allow
Maximum table rows	Shipped default	Use current setting	500
Table filter	Shipped default	Use current setting	*USRLIBL
Table filter is user preference	Shipped default	Use current setting	Allow
Insert records into table	Shipped default	Use current setting	Allow
Insert record columns	Shipped default	Use current setting	Columns...
Update records in table	Shipped default	Use current setting	Allow
Update record columns	Shipped default	Use current setting	Columns...
Quick view table records	Shipped default	Use current setting	Allow
Maximum quick view rows	Shipped default	Use current setting	1000
Order	Shipped default	Use current setting	No

Example: Simple Database User

- The following screen shots step through setting the policies so a specific user only has the ability to run preconfigured database queries to generate reports.
- This example shows
 - the “Before” picture of what DB functions a user can perform with no customization of System i Access for Web
 - the specific database policies to set to restrict our user named REPORT_MAN
 - what general policies need to be set to restrict use of non-DB related functions by REPORT_MAN
 - The “After” picture of what REPORT_MAN can do
- When the policy is set, it takes effect immediately.

Example: Simple Database User - Before

Accessing the Database tab of System i Access for Web as user REPORT_MAN

The screenshot shows a web browser window titled "iSeries Access for Web Database". The address bar contains the URL "http://mySeries.myCompany.com/webaccess/iWAMain?tab=database". The browser's status bar at the bottom indicates "Done" and "Internet".

The main content area is titled "iSeries Access for Web" and "Database". A blue bar at the top of the content area displays "User: report_man", with a red arrow pointing to it from the right. The page content includes a sidebar with navigation options and a main area with sections for "Tables", "My requests", "Run SQL", and "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
- Other

Database

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

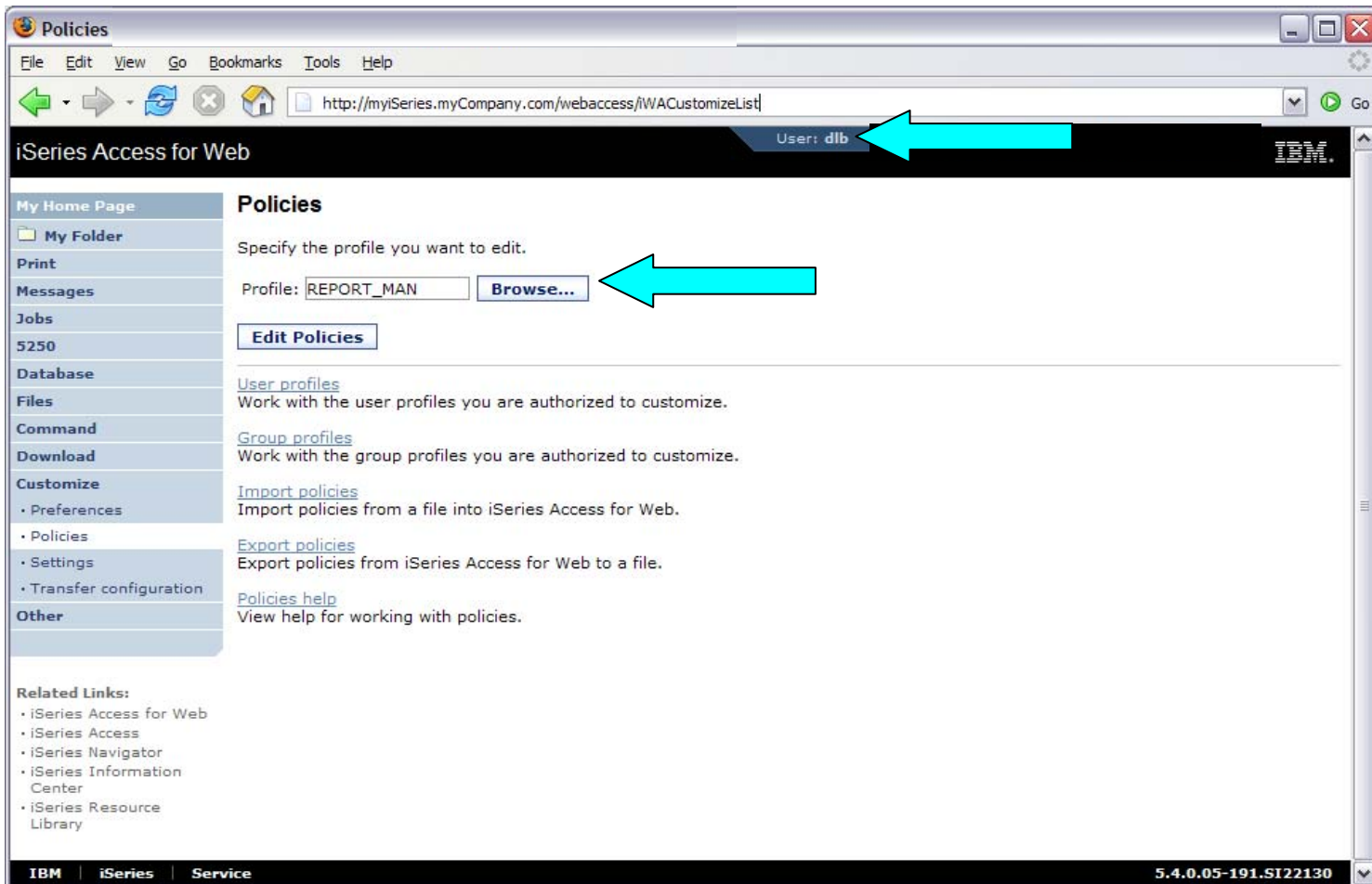
Run SQL

- 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

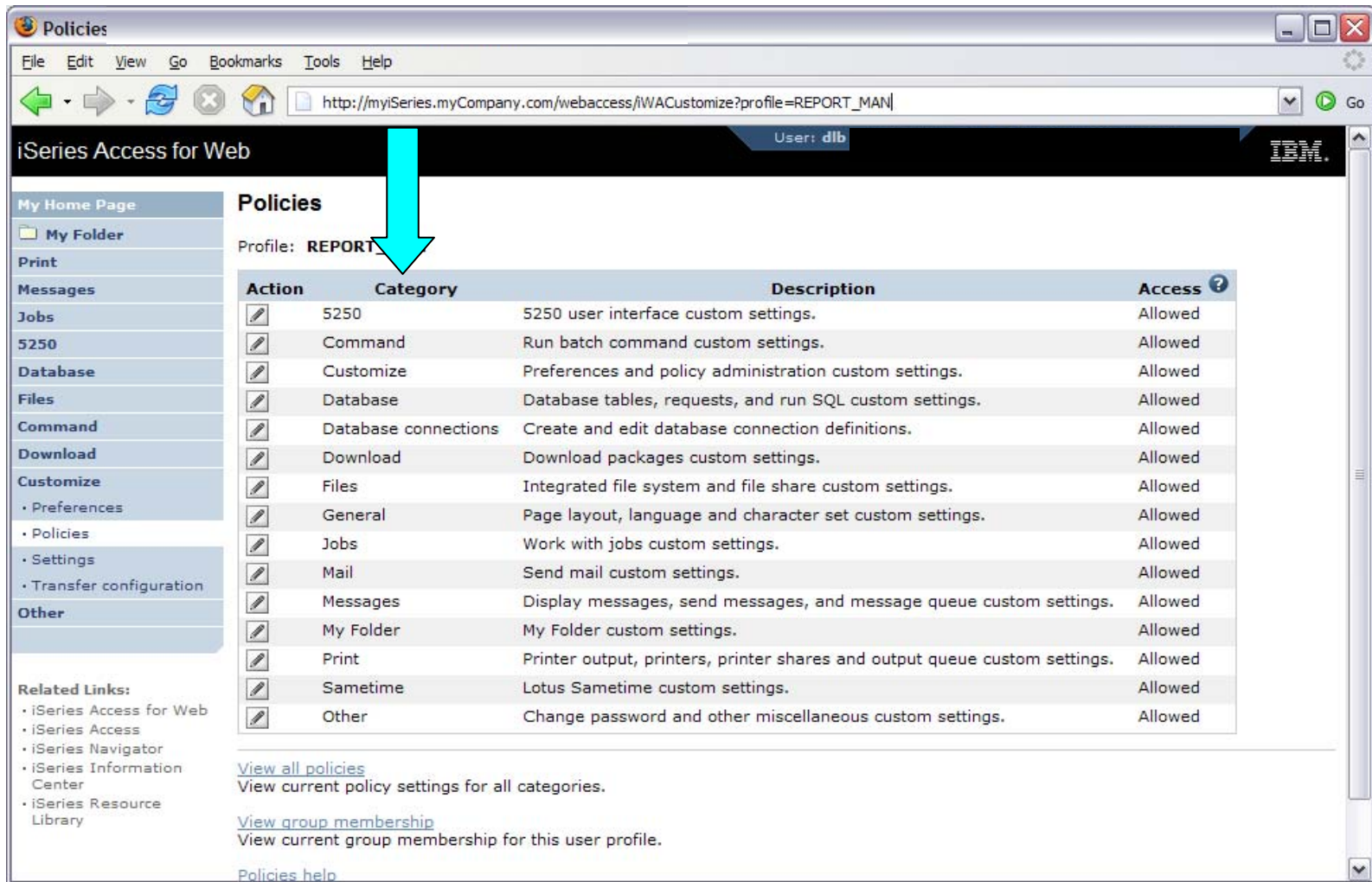
Example: Simple Database User - Policies

- Policies - the starting point for customization of a specific user or group.
- This is a new browser session, where we signed on as an administrator.



Example: Simple Database User - Categories

- Determine which categories need to be restricted/modified.



The screenshot shows the IBM iSeries Access for Web interface. The browser address bar displays `http://myiSeries.myCompany.com/webaccess/iWACustomize?profile=REPORT_MAN`. The user is identified as `User: dlb`. The page title is `Policies` and the profile is `REPORT`. A red arrow points to the `Policies` section header.

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

Below the table, there are two links:

- [View all policies](#)
View current policy settings for all categories.
- [View group membership](#)
View current group membership for this user profile.

At the bottom left, there is a [Policies help](#) link.

Example: Simple Database User – Other

- Turn off the other non-Database functions. Set top level to Deny.
- Repeat for each category, other than Database

Policy	Derived From	Action	Setting
5250 access	Shipped default	Use current setting	Allow
5250 tab	Shipped default	Use current setting	Deny
Start non-configured sessions	Shipped default	Use current setting	Allow
Prompt when starting non-configured sessions	Shipped default	Use current setting	Yes
Show server name in title	Shipped default	Use current setting	Yes
Show configured session name in title	Shipped default	Use current setting	No
Maximum active sessions	Shipped default	Use current setting	No maximum
Inactive session timeout	Shipped default	Use current setting	24 hours
Active sessions list columns	Shipped default	Use current setting	Columns...
Configured session to use for defaults	Shipped default	Use current setting	User defaults
Save settings as user defaults	Shipped default	Use current setting	Allow
Load settings from user defaults	Shipped default	Use current setting	Allow
Load settings from shipped defaults	Shipped default	Use current setting	Allow
Switch between Web/Traditional views	Shipped default	Use current setting	Allow
Edit active session settings	Shipped default	Use current setting	Allow
Bypass signon	Shipped default	Use current setting	Allow

Example: Simple Database User

- Allow access to Database function.
- Set Tables policy to Deny.

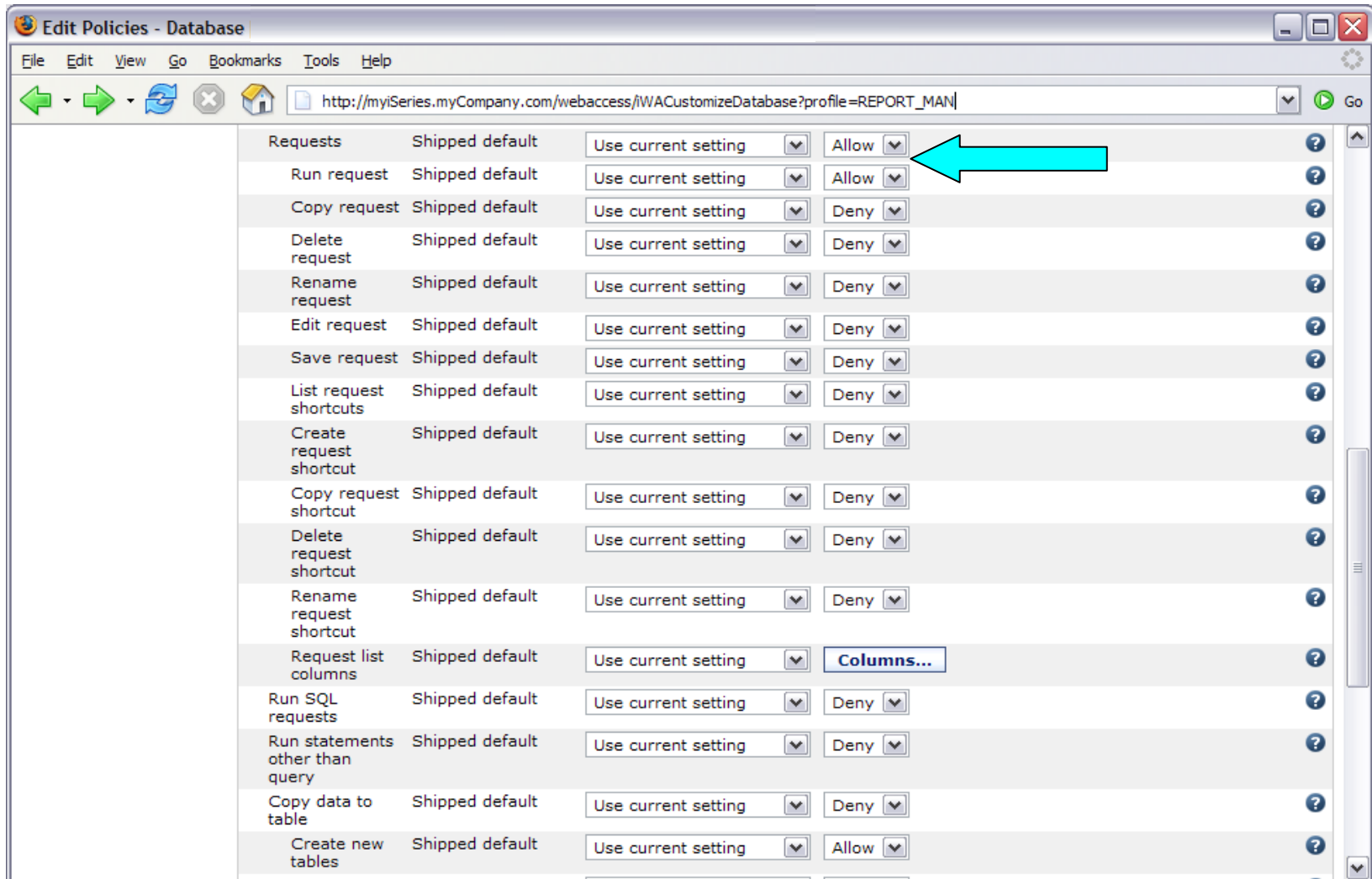
Edit Policies - Database

Profile: **REPORT_MAN**

Policy	Derived From	Action	Setting
Database access	Shipped default	Use current setting	Allow
Database tab	Shipped default	Use current setting	Show
Tables	Profile setting	Use current setting	Allow Deny
Maximum table rows	Shipped default	Use current setting	Allow Deny
Table filter	Shipped default	Use current setting	*USRLIBL
Table filter is user preference	Shipped default	Use current setting	Allow
Insert records into table	Shipped default	Use current setting	Allow
Insert record columns	Shipped default	Use current setting	Columns...
Update records in table	Shipped default	Use current setting	Allow
Update record columns	Shipped default	Use current setting	Columns...
Quick view table records	Shipped default	Use current setting	Allow
Maximum quick view rows	Shipped default	Use current setting	1000
Order	Shipped default	Use current setting	No

Example: Simple Database User

- Only allow the user the ability to run a saved DB request (Run request)



The screenshot shows a web browser window titled "Edit Policies - Database". The address bar contains the URL: `http://myiSeries.myCompany.com/webaccess/iWACustomizeDatabase?profile=REPORT_MAN`. The main content area is a table with columns for "Requests", "Shipped default", "Use current setting", and "Allow". A red arrow points to the "Allow" dropdown for the "Run request" row.

Requests	Shipped default	Use current setting	Allow	
Run request	Shipped default	Use current setting	Allow	?
Copy request	Shipped default	Use current setting	Deny	?
Delete request	Shipped default	Use current setting	Deny	?
Rename request	Shipped default	Use current setting	Deny	?
Edit request	Shipped default	Use current setting	Deny	?
Save request	Shipped default	Use current setting	Deny	?
List request shortcuts	Shipped default	Use current setting	Deny	?
Create request shortcut	Shipped default	Use current setting	Deny	?
Copy request shortcut	Shipped default	Use current setting	Deny	?
Delete request shortcut	Shipped default	Use current setting	Deny	?
Rename request shortcut	Shipped default	Use current setting	Deny	?
Request list columns	Shipped default	Use current setting	Columns...	?
Run SQL requests	Shipped default	Use current setting	Deny	?
Run statements other than query	Shipped default	Use current setting	Deny	?
Copy data to table	Shipped default	Use current setting	Deny	?
Create new tables	Shipped default	Use current setting	Allow	?

Example: Simple Database User

- Turn off the ability to perform the remaining database functions
- Save the changes

The screenshot shows the 'Edit Policies - Database' window with a table of permissions. The table has columns for the function name, the current policy (all are 'Shipped default'), a dropdown for 'Use current setting', and a dropdown for the final permission. A red arrow points to the 'Save' button at the bottom left.

Function	Current Policy	Setting	Final Permission
Request list columns	Shipped default	Use current setting	Columns...
Run SQL requests	Shipped default	Use current setting	Deny
Run statements other than query	Shipped default	Use current setting	Deny
Copy data to table	Shipped default	Use current setting	Deny
Create new tables	Shipped default	Use current setting	Allow
Append data to tables	Shipped default	Use current setting	Allow
Replace data in tables	Shipped default	Use current setting	Allow
Import request	Shipped default	Use current setting	Deny
Import query	Shipped default	Use current setting	Deny
Extract server object data	Shipped default	Use current setting	Deny
Default connection	Shipped default	Use current setting	IBM Toolbox for Java
Default connection is user preference	Shipped default	Use current setting	Deny
Add IBM Toolbox for Java to connection list	Shipped default	Use current setting	Deny

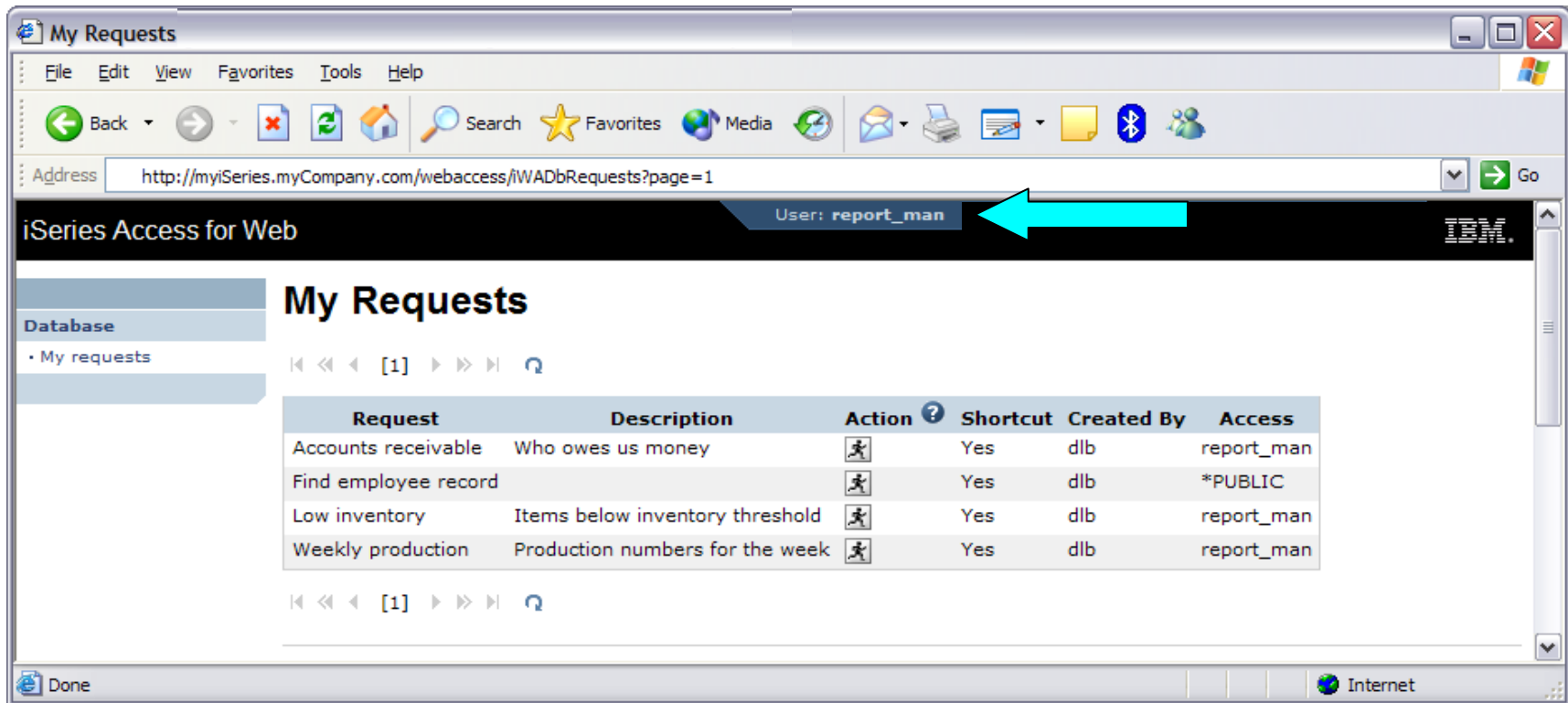
Save **Cancel** **Apply**

[Policies help](#)
View help for editing policies.





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Example: Simple Database User - Completion

- The user can now only run the DB queries they have been given.



The screenshot shows a web browser window titled "My Requests". The address bar displays the URL: `http://myiSeries.myCompany.com/webaccess/WADbRequests?page=1`. The user is identified as "report_man" in the top right corner of the page, with a red arrow pointing to it. The main content area is titled "My Requests" and contains a table with the following data:

Request	Description	Action ?	Shortcut	Created By	Access
Accounts receivable	Who owes us money		Yes	dlb	report_man
Find employee record			Yes	dlb	*PUBLIC
Low inventory	Items below inventory threshold		Yes	dlb	report_man
Weekly production	Production numbers for the week		Yes	dlb	report_man

The browser's status bar at the bottom shows "Done" and "Internet".

***User Preferences:
Users can set their own Preferences***

User Preferences

- The Preferences function allows users to customize System i Access for Web settings to meet their needs.
- By default, all users are allowed to modify their preferences.
- Preferences are a subset of the complete list of available policy settings.
- Users can set the following types of preferences
 - Column inclusion and ordering for functions that display output in columns.
 - Number of rows per page to display on output.
 - Show or hide navigation bar tabs.
 - Preferred language and character set.
 - And more
- Restricting access to Preferences
 - Administrators can deny specific users or groups from accessing their preferences.
 - This is controlled by the "Edit preferences" policy.

Example: User Preferences, Printer output

- The following screen shots step through setting a user preference for Printer output.
- This example shows
 - the default printer output page for user BASIC_USER.
 - what settings the user can modify to change the printer output page output.
 - the printer output page after user BASIC_USER modifies the preferences.
- When the policy is set, it takes effect immediately.

Example: User Preferences, Printer output (continued)

- The printer output display defaults with many columns of information.

The screenshot shows a web browser window titled 'Printer Output' displaying a page for 'basic_user'. The page title is 'Printer Output for basic_user'. A table lists printer jobs with columns for File Name, User Data, Creation Date/Time, Pages Per Copy, Copies, Status, Action, User, Job Name, Job Number, and File Number. A red arrow points to the 'File Number' column header. Below the table, there is an 'Action Details' section listing various actions available for the printer output.

File Name	User Data	Creation Date/Time	Pages Per Copy	Copies	Status	Action	User	Job Name	Job Number	File Number
QPDSPAJB		1/30/06 2:38 PM	8	1	Ready	[Icons]	BASIC_USER	QPADEV000G	562152	1
QPDSPSTS		1/30/06 2:38 PM	1	1	Ready	[Icons]	BASIC_USER	QPADEV000G	562152	2

Action Details

The Printer Output function supports the following actions:

- Work With**
Use the Work With action to hold, release or print the specified spooled file next. There are also links available that will allow the spooled file:
 - Move printer output to another printer
 - Move printer output to another output queue
 - Send printer output to another server (SNDTCPSPLF)
 - Change printer output attributes (CHGSPLFA)
 - Copy printer output to database file (CPYSPLF)

Example: User Preferences, Printer output (continued)

- Click on the Customize tab to work with Preferences.

Preferences

File Edit View Favorites Tools Help

Address http://myiSeries.myCompany.com/webaccess/iWACustomize

User: basic_user

iSeries Access for Web

My Home Page

- My Folder
- Print
- Messages
- Jobs
- 5250
- Database
- Files
- Command
- Download
- Customize
 - Preferences
- Other

Related Links

- iSeries Access for Web
- iSeries Access
- iSeries Navigator
- iSeries Information Center
- iSeries Resource Library

Preferences

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

[View all preferences](#)
View current preference settings for all categories.

[Preferences help](#)
View help for working with preferences.

Done Internet

Example: User Preferences, Printer output (continued)

- AFTER: The printer output display now only has a few columns.

The screenshot shows the 'Printer Output for basic_user' page in a web browser. The browser address bar shows 'http://mySeries.myCompany.com/webaccess/WASpool'. The page title is 'iSeries Access for Web' and the user is 'basic_user'. The left sidebar contains a navigation menu with sections like 'My Home Page', 'Print', 'Messages', 'Jobs', 'Database', 'Files', 'Command', 'Download', 'Customize', and 'Other'. The main content area displays a table of printer jobs with the following data:

File Name	Pages Per Copy	Status	Action ?
QPDSPAJB	8	Ready	[...]
QPDSPSTS	1	Ready	[...]

Below the table, the 'Action Details' section states: 'The Printer Output function supports the following actions:'

- **Work With**
Use the Work With action to hold, release or print the specified spooled file next. There are also links available that will allow you to perform the following actions on the spooled file:
 - Move printer output to another printer
 - Move printer output to another output queue
 - Send printer output to another server (SNDTCPSPLF)
 - Change printer output attributes (CHGSPLFA)
 - Copy printer output to database file (CPYSPLF)
- **View**
Use the View action to view the printer output.

A red arrow points to the 'Action ?' column header in the table.

Policy Tools for Administrators

Policies and Tools

- Import/Export policy settings
 - Pick a user or group for export

- Transfer configuration data from one user to another
 - Move and copy operations supported for:
 - 5250 sessions and macros
 - Saved commands
 - Database requests
 - My Folder items
 - Policies

Transfer Configuration Data

Transfer Configuration Data

File Edit View Go Bookmarks Tools Help

http://myiSeries.myCompany.com/webaccess/IWATransferCfg

User: dlb

My Home Page

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

Transfer Configuration Data

Profiles ?

From profile: **Browse...**

To profile: **Browse...**

Action to Perform ?

Copy

Move

Data to Transfer ?

- 5250 sessions
- 5250 macros
- Commands
- Database requests
- Folder items
- Policies

Transfer Data

[Transfer configuration data help](#)
View help for transferring configuration data.

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Page customization

Home Page Customization

- A default home page is displayed when the iWAHome servlet is invoked.
 - `http://<mySystem.myCompany.com>/webaccess/iWAHome`
 - It's a starting point to highlight functions.
 - It's an example of how to build your own home page or pages that access System i Access for Web functionality.
- The Customize function allows you to replace the default home page.
- Default home page replacement can be done for all users (*PUBLIC), or can be changed for only certain users and/or groups of users.
- Great article - example
 - "Build a quick and easy Web site with System i Access for Web" - Janet Weber
 - http://www.ibm.com/servers/eserver/iserries/access/pdf/build_website_article.pdf
 - iSeries 400 Experts Journal
 - **Updated Oct 2006 in System i News - 'Tailor System i Access for Web'**

Template file customization

- System i Access for Web has a default look for its functional pages.
 - This look is controlled by a template file and cascading style sheet.
- The template file has sections to specify
 - Header/footer areas of functional pages.
 - Where System i Access for Web content is placed in the page.
- The Customize function allows you to replace the default template file.
- Default template file replacement can be done for all users (*PUBLIC), or can be changed only for certain users and/or groups of users.

Edit Policies: specify home page and template files

Edit Policies - General [iSeriesD.DFW.IBM.COM] - Mozilla Firefox
 http://iseriesd.dfw.ibm.com/webaccess/iWACustomizeGeneral?profile=LLHIRSCH

User: llhirsch System: iSeriesD.DFW.IBM.COM

Edit Policies - General

Profile: LLHIRSCH

Policy	Derived From	Action	Setting
Home page HTML file	Shipped default	Use current setting	/QIBM/ProdData/Access/Web2/html/homepage.h Browse...
Template HTML file	Shipped default	Use current setting	/QIBM/ProdData/Access/Web2/html/webaccess.h Browse...
Main page HTML file	Shipped default	Use current setting	/QIBM/ProdData/Access/Web2/html/overview.htr Browse...
Home page	Shipped default	Use current setting	Allow
Template	Shipped default	Use current setting	Allow
Navigation	Shipped default	Use current setting	Allow
Related links	Shipped default	Use current setting	Allow

Special tags

- Within the home page and template .html files, special tags are used.
 - When these tags are encountered by the System i Access for Web code, they are replaced with the appropriate content.

- **Special tags...**

- %%CONTENT%%
- %%include section=file%%
- %%MENU%%
- %%STYLESHEET%%
- %%STYLESHEET_CLASSIC_COLORS%%
- %%TITLE%%
- %%SYSTEM%%
- %%USER%%
- %%VERSION%%

- **Replaced with...**

- functional content for the page, separates the header/footer
- HTML section/fragment to include navigation bar
- default style sheet
- default style sheet prior to V5R4
- title of the page
- name of iSeries being accessed
- i5/OS user profile used to access the server
- version of System i Access for Web

- For detailed information on these special tags

- V5R4 System i Access for Web Info Center
 - Connecting to iSeries->System i Access->System i Access for Web->System i Access for Web in a web application sever environment->Customize System i Access for Web->Default page content->Home page

Home Page default – iWAHome servlet

http://<system>/webaccess/iWAHome

The screenshot displays two overlapping browser windows. The background window shows the default iSeries Access for Web homepage for user 'dlb'. The foreground window shows the same page for user 'commonuser', featuring a promotional banner for the 'Spring 2006 Conference & Expo COMMON'. Both pages contain a navigation sidebar, a main heading, and several informational sections including 'Getting Started', 'My Information', 'My View', 'Related Products', 'What is iSeries Access for Web', 'Browser Access to iSeries Server Information', 'Easy Administration', and 'Key Capabilities'. The 'Key Capabilities' section lists: Browser access to existing 5250 applications without requiring code changes; Easy access to DB2(R) Universal Database(TM) (UDB) for iSeries information; and A simple interface to work with information in the Integrated File System.

Home Page customization – iWAHome (another example)


- Custom home page - <http://iseriesd.demos.ibm.com/webaccess/iWAHome>
 - Refer to chart 6 for info on how to access this sample

Access for Water *Supplying quality boats since 2002*

Services

- [View available boats](#)
- [See boat details](#)
- [Order a boat](#)

This Week's Special



Beautifully maintained 28 foot 1978 Carver Santa Cruz for only \$23,900. Head and galley refurbished in 2001. Only 31 hours on completely rebuilt motor. Click [here](#) to see this boat cruising the seas.

Great Deals

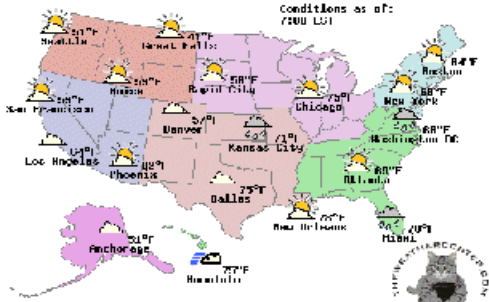
For those bargain conscious among you, we have a large selection of new and slightly used boats for under \$75,000. Whether you are planning on sailing in your backyard pond or navigating the mighty Mississippi we can meet your wants, needs, or desires. [View our selection of modestly priced boats.](#)

Site Support

Your comments are important to us. Please let us know if you have any questions or if we can help you in any way. Address your message to user BOATHELP. [Send us a message](#)

Weather Conditions

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



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Home Page/Template Customization Example (continued)

- Custom template

Quick View of BOATS.BOATS

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Media Print Mail Bluetooth

Access for Water Supplying quality boats since 2002

[Home](#)

Current Orders

Navigation: [1] 2

BTYPE	BNAME	BFEET	BYEAR	BCOST	BNT01	BNT02
C	Poole Boat Co Aluminum	80	1979	1000000	-Located in S. Diego, CA	-Twin Detroit diesels.
P	Carver Santa Cruz	28	1978	23900	-Constructed of fiberglass.	-Single Chevy 350 gas engine, 250 hp. Fresh water cooled,
P	Mako Sportfisher	19	1989	13000	-Located in Anacortes, WA.	-Great fishing boat
P	Monk Bridgedeck Cruiser	36	1956	19900	-Built of mahogany, oak, and cedar.	-The 130 hp power plant is a single, Chrysler cyl. diesel
P	Monk Flybridge/Sedan	34	1985	55000	-Double planked cedar on oak frames.	-The 165 hp power plant is a 1985 V6 Detroit diesel.
P	Monterey Marine Custom	80	1996	2975000	-Located in Stuart, FL	-Monthly payment.
S	Bill Garden Schooner	36	1953	27500	-The hull is 1/8' caravel cedar planked atop 1/4" x 1 1/2" oak frames	and the deck is cedar planked with tar sear

Done Internet

iWAHome - structure

<http://<system>/webaccess/iWAHome>

Homepage file
common_homepage.html

Defines content, layout, images, links to be displayed when the iWAHome servlet is invoked in the browser.

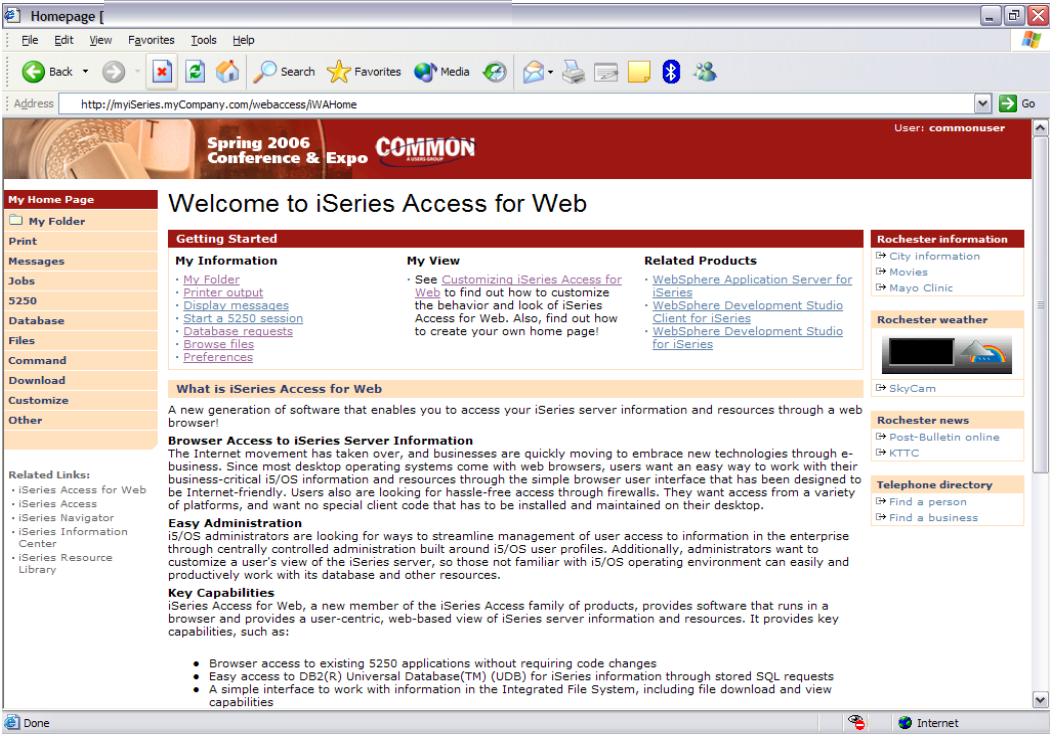


Image files
images/s06common.gif
images/iwa_navCorner.gif

Cascading Style Sheet file
common_styles.css

Defines the colors, fonts, font sizes for the various elements in the .html files.

iWA servlet Template - structure

<http://<system>/webaccess/iWASpool>

Homepage file
common_homepage.html

Defines content, layout, images, links to be displayed when the iWAHome servlet is invoked in the browser.

Template file
common_template.html

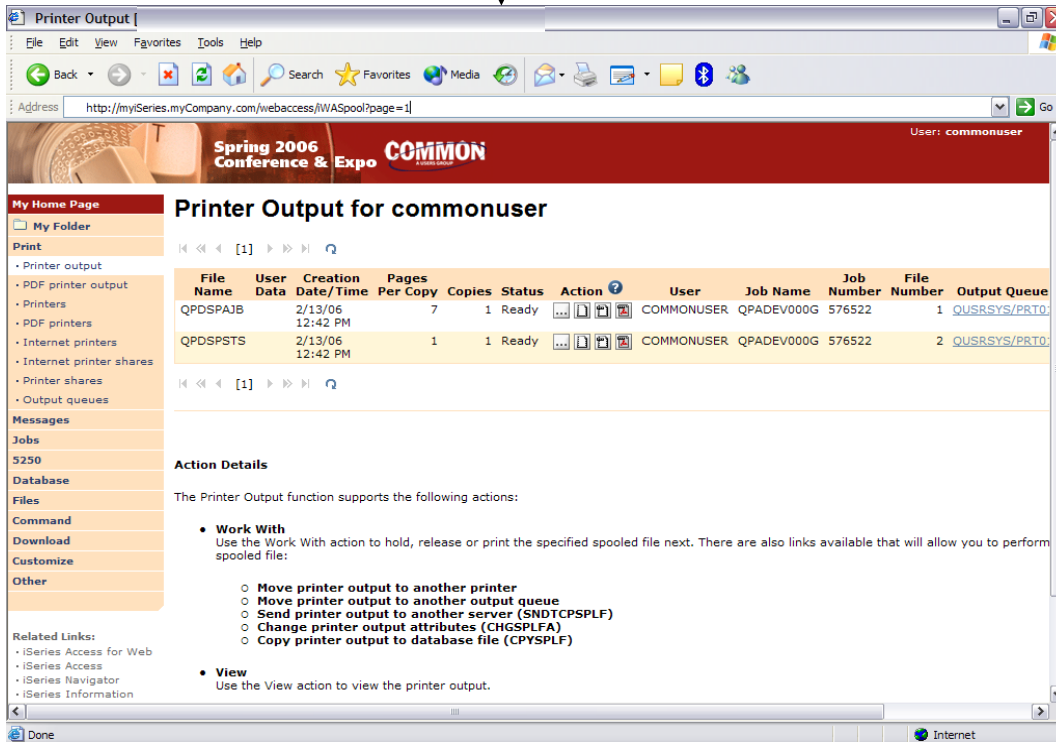
Defines the header, content, footer on all other servlet pages.

Image files

images/s06common.gif
images/iwa_navCorner.gif

Cascading Style Sheet file
common_styles.css

Defines the colors, fonts, font sizes for the various elements in the .html files.



For a step-by-step example of how to customize the Home page and Template files:

ftp://ftp.software.ibm.com/as400/products/clientaccess/win32/presentations/2008_common_webcast/iAW_customize_home_page_charts.pdf

- Customizing policies to use different home page and template files
- Adding a different image as header, changing the footer
- Updating the cascading style sheet

NOTES: If using WAS Network Deployment

- For the WebSphere Application Server Network Deployment environment
 - WebSphere v5.0/5.1 Base Edition must be installed
 - WebSphere v6.0 Base/Express Edition must be installed
 - System i Access for Web does not support WebSphere instances/profiles that are federated to the WebSphere Network Deployment environment



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